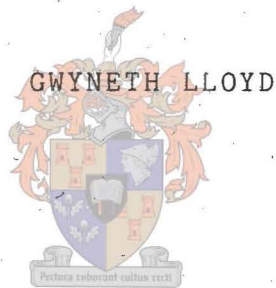


THE APPLICATION OF THE ALEXANDER TECHNIQUE
TO THE TEACHING AND PERFORMING OF
SINGING:
A CASE STUDY APPROACH

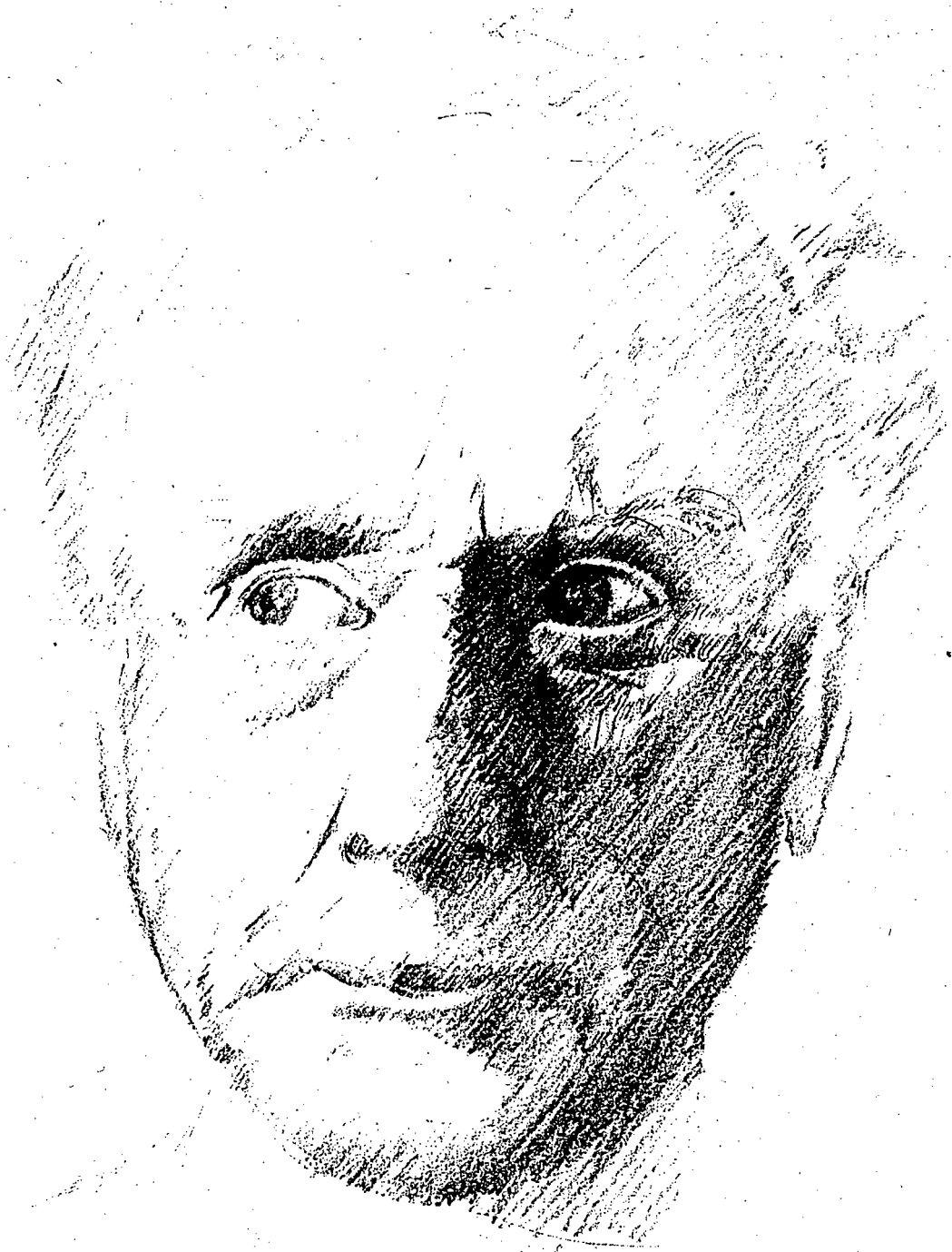
BY



Thesis presented in partial fulfilment
of the requirements for the degree of
Master of Music at the University of
Stellenbosch

Supervisor: Miss Nellie du Toit

Submitted
December 1986



Anton van der Merwe

FREDERICK MATTHIAS ALEXANDER
1869 - 1955

THE F.M. ALEXANDER TECHNIQUE

The Alexander Technique is an important addition to man's resources of self-awareness and personal education. Established by F.M.Alexander (1869-1955) in the late 1890's, the Technique is valued in educational, theatrical and musical circles as a method of psycho-physical re-education. Lessons in the Technique help the pupil overcome patterns of bodily mis-use that interfere with poise and free movement in all areas of activity. This encourages improved functioning, both physically and psychologically, with attendant benefits in co-ordination, health and well-being.

Issued by the Society of Teachers of the F.M.Alexander Technique.

July 1984

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I INTRODUCTION

STATEMENT OF THE PROBLEM

I had been singing in London for seven years, initially in the amateur field and latterly as a full-time professional. My regular performing had started with solos in oratorios and concerts and then extended to lighter operatic roles. It was while performing in "The Marriage of Figaro" as the Countess and "Faust" as Marguerite that I realised that I required a far greater understanding of my whole psycho-physical mechanism.

I decided to devote a year to examining my vocal technique. After nine months I realised that there were certain habits that were impeding my progress -

1. My torso gradually dropped forward and downward while singing. I had started my singing career with this habit and had not been able to overcome it, in spite of advice from my teachers and my own efforts of will.
2. My arms were tense while I sang. This was also an old habit which had improved since my first singing lessons but not completely disappeared.
3. My jaw was not free enough for singing, and the exercises I tried seemed to have little effect.
4. My lower back did not participate flexibly in the breathing process and I seemed to have very little control in this area.

These were the most noticeable symptoms of a singing technique that was becoming unnecessarily effortful and therefore tiring. At this stage I twisted my back and was told by the doctor that I had a weakness in my lower back for which there was no cure.

As I was casting round for solutions, I noticed that other singers, both students and professionals, also suffered from similar tension habits. It was then that I remembered my brief experience of the

Alexander Technique and the idea of a study project evolved.

Each singer has his own combination of physical tensions and the extent of the tension varies according to current stress and the number of years that the tension habit has been used.

Common stress patterns among singers are:

1. Fixed neck - either with chin too high or too low.
2. Fixed eyes - habitually on the floor or directed over the heads of the audience.
3. Stiff jaw - almost every singer has to pay attention to this problem.
4. Pulling down the chest - another very common problem which is difficult to solve.
5. Over-tensed diaphragm - the epigastrium (stomach wall) remains tense after singing activities.
6. Rising shoulders - part of the pulling down in the chest habit.
7. Lower back - either a rigid tension or total lack of activity here.
8. Pelvis - fixed either too far back or too far forward.
9. Tight thighs - often associated with the effort of high notes.
10. Knees braced - tends to encourage rigidity throughout the body.
11. Feet tense - also stiffens the whole body, right up to the neck.

Details and combinations of such tensions vary with each singer and the teacher has the responsibility for helping

the student to recognise and try to eliminate such tensions.

The problem lies in the usual length of time devoted to singing technique either in a music school or for private tuition. Usually a singer will spend one hour a week with the teacher and in that time the teacher has to train the whole instrument, which, of course, involves the correct use of the whole body. The common tensions outlined above have been built up over the course of the singer's lifetime and the teacher has one hour a week in which to try and reverse such habits.

My own decision to work intensively on vocal technique for one year convinced me of the enormity of this problem. Since that year I have taught privately, within a music college system and observed other teachers at work in Cape Town, London and New York. It is my view that the incorporation of the Alexander Technique into a singer's curriculum and performing training is an urgent necessity.

Aims of the Project

1. To examine through case studies specific ways in which a singer might increase his kinesthetic awareness through the Alexander Technique and apply this to the art of singing or body re-education.
2. To apply the findings of this examination to one further case study with particular attention to ease of posture and breathing.
3. To examine four further case studies with attention to postural changes brought about by thirty Alexander Technique lessons.

F.M. Alexander began his personal search for a solution to vocal problems because he was regularly losing his voice during performances. This experience is related in detail in The Use of the Self (1932). He also published Man's Supreme Inheritance (1910), Constructive Conscious Control of the Individual (1923) and The Universal Constant in Living (1941). These books explain the profound implications of the system of body re-education that he evolved throughout his lifetime.

I found references to the advantages of the Alexander Technique in several books about training singers, but very little detail about how the Technique was used in the production of the voice. There was, however, enough to indicate that other singers had benefitted from the Technique.

G.C. Bowden, a British singing teacher, writes:

"There is always that difficulty the artist, craftsman or player experiences of being out of touch with himself, off the beam, empty of inspiration. And it is precisely here that the Alexander Technique comes to the rescue." ¹

In The Art of Song Recital Emmons and Sonntag make a very clear statement:

"American actors' training organisations today use F. Matthias Alexander's discipline to achieve head-neck-torso alignment, which gives physical freedom, which in turn gives psychological freedom. Since singers, perhaps more than actors, urgently need physical freedom as well as psychological freedom, it seems very foolish for them to resist such necessary training." ²

In his contribution to the collection of articles on Tensions in the Performance of Music Walter Gruner makes several interesting points:

"... co-ordinated body control will remove tension-producing anxieties." ³

"The student of singing has to learn what muscular relaxation means." ⁴

1. G.C. Bowden, F. Matthias Alexander and the Creative Advance of the Individual; p. 34.
2. S. Emmons and S. Sonntag, The Art of Song Recital, p. 117
3. C. Grindea, Tensions in the Performance of Music, p. 62.
4. Ibid. p. 63.

In the same collection of articles, Leigh Howard outlines a series of limbering-up exercises based on the ideas behind the Alexander Technique and goes on to discuss awareness as a key to the problem of tension:

"...first it is necessary to create a conscious awareness of self in order to counter the ill effects which self-consciousness brings:

- a) Awareness of physical tension as a fact and a recognition of its presence and the form it takes with each individual,
- b) the practise of appropriate exercises which help to establish a 'norm' of freedom in body and voice,
- c) the recognition of the free sound of the voice supported on the constant flow of the breath stream."

There was also evidence of an international singer using the Alexander Technique as powerful tool in his survival kit - Alan Titus, the American baritone, attributes a significant role to the Alexander Technique in his development as an artist.

"Titus has formed an intricate support system... beginning with his mother, his wife, his vocal teachers, his first manager... and a number of friends. Add to this a number of years of study of the Alexander Technique to achieve total freedom of the body, from which evolved a focussed approach to singing and being on stage. As he explains, 'There is an Alexander principle that energy follows thought.'

With Alexander he's also found that a singer doesn't have to 'bleed' in every performance: 'It's a matter of keeping your center.' The ideal is to create the illusion of tension on stage without actually becoming tense... But it is hard to just let it happen...how do you do that and not have your anxieties about whether you're going to make a top note at the end or not? How do you not prepare but stay completely loose in the moment of what you're doing and still have that

excitement?

The more tired I got, the more I used my Alexander Technique, and the more I started getting rid of tension to keep up the schedule. I get so boring about Alexander, but it's a shame more singers don't do it... We're fighting against gravity continually - gravity is pulling us down. We're always falling into ourselves and the big secret - which is profound, because it affects our concept about everything - is the contrast of the tension, of pulling against gravity... We don't have a language to describe this reality, but it is the 'up' you feel when you have this Alexander experience." ¹

This was an expression of what I knew about the Alexander Technique from my own limited experience, being conceptualised by a successful and experienced artist. However, there was still no direct description of how his years of study of the Technique had accomplished this tremendous form of support.

Further indication that singers and singing teachers were making use of the Technique came from Pamela Payne-Lewis's thesis, The Alexander Technique: Its Relevance for Singers and Teachers of Singing. She conducted a survey in 1980 to find out to what extent teachers of singing were using the Technique and how they evaluated its effects on their pupils. In July 1984 she revised the findings of her survey in an article in the Journal of Research in Singing in which she states:

"...additional surveys of teachers of singing and singers who have had extensive Alexander training would be useful... the impact of the Technique on those with minimal training is remarkable. Additional studies that explored specific relationships between Alexander principles and the act of singing would do much to clarify the benefits of the Technique for singers and teachers of singing." ²

1. R. Jacobson, OPERA NEWS, "Living the Moment", pp. 11, 14. & 43.

2. P.P. Lewis, JOURNAL OF RESEARCH IN SINGING, "The Alexander Influence: A Comparative Study", p. 17.

It was these specific relationships which interested me and became the aim of the study project.

Although Pamela Payne Lewis's survey did not include anyone who had studied the Alexander Technique intensively, during the course of her study of speech for singers she points out some crucial benefits that could be derived:

"As the Alexander student begins to discover for himself what his habitual patterns of movement are, he can make conscious choices about how to use his body. He does not have to rely on inefficient habits as the processes by which to achieve desired goals. The Alexander Technique thus becomes not just a technique for singing or speaking but an orientation to mind-body use that affects every dimension of one's activity. Development of intellectual and kinesthetic self-awareness is central to Alexander training, and is also essential to the fine speaker or actor, dancer or singer."

One example of a pupil making a conscious choice about how to use her body during the act of singing can be found in Frank Pierce Jones's article "Voice Production as a Function of Head Balance in Singers". Mr Jones conducted research in kinesthesia at Tufts University using multiple-image photography, electromyography and force/time records obtained from a strain-gauge force platform to demonstrate the effect of the Alexander Technique. He writes:

"The procedure for changing the reflex balance of the head during a learned activity was developed by the late F.M. Alexander as a method of dealing with vocal strain. The pupil is trained to recognize and inhibit an increase in muscle tension which tends to fix the position of the head by decreasing the distance between occiput and seventh cervical vertebra. When he is able to maintain this inhibition during speaking or singing, he can exercise an indirect control which facilitates voice production. The effect can be demonstrated experimentally by counterbalancing habitual head displacement by manual pressure about the occiput sufficient

to prevent muscles attached to the head from shortening. If the pressure is maintained while the subject is projecting his voice, the neck can be observed to lengthen and the resonance of the voice to increase."¹. X

Mr Jones proceeds to verify this increase in resonance by using a tape recorder and a sound spectrogram.

Alexander Technique lessons are offered at most of the major music and drama colleges in Britain and the United States. I once discussed the subject with a singing teacher at the Guildhall School of Music and Drama who said that she encouraged all her singers to study the Alexander Technique, but she admitted that she could see very little evidence that they were able to use their skills outside the Alexander lessons or in their singing. This probably means that the students did not pay enough attention to the significance of what they were being taught. The other possibility is that co-operation and communication between the teachers concerned with singing and Alexander Technique would help the students to gain maximum benefit from the Alexander lessons. The ideal is a singing teacher with a certificate in Alexander Technique but these people are few and far between.

Certainly, there seems to be a need for the exploration of the specific relationships between singing and Alexander Technique. The literature indicates a wealth of potential avenues for progress in the realm of mind-body control and co-ordination, channelling energy, using freedom and release at vital moments in performance and understanding awareness using the skills of the Alexander Technique in daily activities as well as teaching and performing. The possibilities of these specific relationships are infinite and a study project can only open up these possibilities as further tools in the learning of singing.

1. F.P. Jones, THE JOURNAL OF PSYCHOLOGY, "Voice Production as a Function of Head Balance in Singers", 1972, Vol. 82, pp. 209-215.

III THE ALEXANDER TECHNIQUE

DEFINING THE ALEXANDER TECHNIQUE

There are as many definitions of the Alexander Technique as there are people writing about it. The definition issued by the Society of Teachers of the Alexander Technique in July 1984 (see frontispiece) is useful to hand out to prospective students. In most of the books and articles I have read the author expresses reservations about being able to find the right words to explain the essence of the Technique. Because it is concerned with the co-ordination of mind and body use, it has attracted writers from vastly differing fields of enquiry. Alexander's own books are fastidiously detailed explanations of both his practice and his theory that are fascinating reading for any student of his Technique. In addition, enthusiastic Alexander Technique students - some eminent, some competent as writers, some powerful, some just enthusiastic - have emerged as advocates and interpreters of his writing and teaching.

* Professor John Dewey, the eminent philosopher and educationalist, was one of Alexander's students. He writes in the introduction to Alexander's book, The Use of the Self:

"...his procedure and conclusions meet all the requirements of the strictest scientific method, and... he has applied the method in a field in which it has never been used before - that of our judgements and beliefs concerning ourselves and our activities. ... If there can be developed a technique which will enable individuals really to secure the right use of themselves, then the factor on which depends the final use of all other forms of energy will be brought under control. Mr Alexander has evolved this technique." ¹ He goes on to describe his own experience of the Technique:

"... I verified in personal experience all that Mr Alexander says about the unity of the physical and psychical in the psychophysical; about our habitually wrong use of ourselves and the part the wrong use plays in generating all kinds of

1. F.M. Alexander, The Use of the Self, p. xvii of introduction by Prof. Dewey.

unnecessary tensions and wastes of energy; about the vitiation of our sensory appreciations which form the material of our judgements of ourselves; about the unconditional necessity of inhibition of our customary acts, and the tremendous difficulty found in not "doing" something as soon as an habitual act is suggested, together with the great change in moral and mental attitude that takes place as proper co-ordinations are established." ¹.

In 1973 Professor Nicolaas Tinbergen, the ethologist, spoke on Alexander's work in his Nobel Prize winning speech. His praise of Alexander's achievement is quoted by countless writers who wish to convey the reaction of the scientific world to the principles behind his teaching. "This story of perceptiveness, of intelligence and of persistence shown by a man without medical training, is one of the true epics of medical research and practice." ².

Interpretation of Alexander's teaching from the point of view of someone with medical training is offered by Dr Wilfred Barlow in his book The Alexander Principle: "The Alexander Principle states that there are ways of using your body which are better than certain other ways. That when you lose these better ways of using your body, your functioning will begin to suffer - in some important respects.... This approach is not a fringe-medicine, a neo-progressive education, a religious escape, or a quack science. It is a difficult disciplined approach to personal living which leads, through discipline, to a personal freedom and health which is possible to some extent for most people at most ages." ³.

Another eminent scientist, Professor Raymond Dart, attended lessons in the Alexander Technique with Miss Irene Tasker, a teacher trained by Alexander himself. In 1947 he writes in the South African Medical Journal:

"She revealed to me how my own malpostured habits of sitting,

1. F.M. Alexander, *The Use of Self*, p. xx of introduction by Prof. J. Dewey.
2. E. Maisel, *The Alexander Technique*, p.xiv of introduction.
3. W. Barlow, *The Alexander Principle*, p.18.

standing, walking and lying down could be bettered by her manipulating my moving body concurrently with my consciously inhibiting that wrongful 'intermeddling with reflex details' of such activities ...which previously had characterised their performance."¹.

This eminent anatomist was invited to deliver the Annual Memorial Lecture to The Society of Teachers of the Alexander Technique twenty three years later. His respect for Alexander's work remained intact and he added:

"The electronic facilities of the sixties have confirmed Alexander's insight and authenticated the technique he discovered in the eighteen nineties of teaching both average and skilled adult individuals to become aware of their wrongful body use, how to eliminate handicaps and thus achieve better i.e. increasingly skilled use of themselves both physically and mentally."².

I return to Frank Pierce Jones, Research Associate at Tufts Institute for Psychological Research, Boston, whose research in kinaesthesia contributed much to the scientific confirmation of the validity of Alexander's work:

"...release of neck-muscle tension, allowing surface muscles in the neck to lengthen, increases the antigravity response in postural muscles; shortening the same muscles decreases the strength of the response. It is well established that head-neck reflexes are used by animals to change the distribution of tonus in the trunk and limbs and that the same mechanism probably operates in human beings.

It is unnecessary, however, to know why the mechanism works in order to use it. The chief difficulty lies in the fact that we are not accustomed to making kinesthetic observations and prefer to accept the evidence of our other senses or somebody else's judgement rather than critically examine our feelings of tension and weight. The only satisfactory technique I know for dealing with this problem was devised by F.M. Alexander some 60 years ago. By watching himself in a triple mirror, Alexander was able to correlate changes in the axis of his head with a loss of voice in speaking. He found that

1. R.A. Dart, SOUTH AFRICAN MEDICAL JOURNAL, "The Attainment of Poise", p. 79

2. R.A. Dart., AN ANATOMIST'S TRIBUTE TO F. MATTHIAS ALEXANDER, Annual Memorial Lecture delivered before The Society of Teachers of the Alexander Technique on 20th March 1970, p. 34.

by inhibiting the change in head-axis he not only regained the use of his voice but produced an unexpected redistribution of tension throughout his body which brought with it an improvement in breathing and other automatic functions. For imparting his discovery to others, he developed a non-verbal technique which is referred to as the Alexander technique. In it the pupil learns to inhibit any tendency he may have to alter the reflex balance of his head, while the teacher initiates some simple, everyday movement and guides the pupil through to its completion. Any movement will do: walking, shifting position in a chair, getting up and sitting down, picking up a pencil. During this kind of movement (which should be called 'reflex facilitated', rather than active or passive) postural tonus is redistributed. This is perceived by the subject as a reduction of the feeling of weight and in the effort needed to move. This kinesthetic effect persists long enough after a lesson to give the pupil an opportunity to observe his own habitual actions against a new background of postural tonus. In this way he gradually builds up a standard of kinesthetic judgement for himself and can go on to make further observations and experiments of his own. In doing so he has added greatly to his resources for self-improvement."¹

With definitions like these from eminent and erudite scientists and scholars, it is not necessary for me to evolve yet another definition. The expectations and potential implied in all the definitions put new hope into my desire to solve the habitual tensions that seemed to be impeding my progress as a singer. The definitions are obviously products of each writer's own experience of the Technique (they had all taken a serious course of lessons) and the aspects referred to relate to the perspective supplied by the writer's own particular discipline. The perspective supplied by my discipline relates to the elimination of unnecessary interference in the production of sound. With over two years of intensive Alexander lessons behind me, I can state that I used the awareness and control acquired in these lessons to carry out my own intentions and the instructions from some first class singing teachers to produce the tension-free sound that I had wanted for so long.

1. F.P. Jones, "The Organisation of Awareness", paper read at a conference on "Co-ordination in Music" at Michigan State University, May 18, 1967, pp. 9-10.

ALEXANDER'S EXPERIENCE

In his book, The Use of the Self, published in 1932, Alexander describes the evolution of his technique. Although his style and attention to minute detail make it difficult to grasp at first reading, a thorough examination of the text is very valuable to any singer, and particularly any singing teacher, motivated to explore the infinite potential of improved mind/body use. Alexander's experience with its failures and successes so honestly related should strike familiar chords in the experience of even the least analytical of singers. As one's experience of the Alexander Technique grows, so the original discoveries of Alexander take on more and more significance in the process of improving one's sound.

Another reason for seriously studying Alexander's approach to solving his vocal problems is to help singers and teachers to discover the root causes for difficulties with vocal sound. There is a great deal of superficial advice and adjustment in the production of sound and, in the end, the singer finds he is still struggling with certain features of his vocal sound that seem to impede the progress towards command of his voice. Many examples of this occurred in the research data following; but one illustration here will suffice. Both a singing pupil and his teacher can endeavour for months and years to open his throat and ease the passage to head resonance; but they are wasting their time if the pupil holds his head too far forward on his shoulders because the shortening of the muscles at the back of his neck is actually preventing access to head resonance. X

A further most important reason for understanding the evolution of Alexander's Technique is to appreciate the qualities of persistence, honesty and trust that led to the results. A singer faces many struggles and disappointments in the course of a career, and it is most instructive to understand how one individual handled such moments. Alexander is reputed to have said, "You can do as I did if you do what I did." The following account of his work will illustrate why no-one has been through the process to which he subjected himself. Fortunately for posterity, he spent the later part of his life evolving a way

of passing his experience on to others.

Frederick Matthias Alexander was born in Tasmania on January 20th 1869. He grew up in the country and received his education in Tasmania. He did not fit into the formal schooling, however, and a perceptive school teacher gave him extra tuition. At the age of sixteen, Alexander took a clerical post with a tin-mining company and saved enough money to leave for Melbourne.

Here he decided to fulfil a long-standing interest in drama and began his acting career. In spite of his outdoor upbringing, he had always suffered from ill-health, and by 1892 he was already becoming plagued by hoarseness during performances. He was treated with inhalations and rest periods, but the spells of hoarseness became closer together until he feared that his voice would not survive a performance. Before one particularly important engagement, he consulted his doctor about how to prevent the recurrence of his hoarseness and was advised to speak as little as possible for two weeks before the performance. In spite of carrying out these instructions by the end of the performance he had almost lost his voice.

During the subsequent consultation with his doctor they agreed that, since his voice had deteriorated so markedly during performances, there must be something wrong with the way he was using his voice. At this point Alexander reached a dead end because his doctor was not able to tell him how to improve the use of his voice. So he decided to search for the solution himself, since the usual medical solutions were not helping him.

He began observing himself while speaking in conversation and while performing by using a mirror. He could not detect unusual habits in his conversational speech, but when he recited he noticed three things:

1. He pulled his head back.
2. He lowered his larynx.
3. He audibly sucked air in through his mouth.

Then he observed his conversational speech again, and noticed that he did the same three things but to a lesser extent. The degree

of exaggeration of these habits increased the more forcibly he used his voice in reciting.

He started to work on his breath intake. He discovered that, although he knew he did not want to gulp air audibly, he was unable to persuade himself to stop this habit.

He then tried to stop his larynx descending when he started to speak, but was also unable to prevent this habit.

Having failed to change his use of the most obvious sources of speech - the breath and the larynx - he turned his attention to the other habit he had detected - pulling the head back. Here he found a different result - he knew he did not want to pull his head back, and he found he could exert his will over this habit. Furthermore, he realised that when he stopped pulling his head back, he also stopped lowering the larynx to speak and he stopped audibly gulping for air. Having realised the importance of the head position, he experimented further and discovered that pulling the head too far forward also resulted in depressing the larynx and led to hoarseness.

So, after six months of observation and experimentation, ALEXANDER REALISED THE IMPORTANCE OF HEAD BALANCE IN THE FUNCTIONING OF THE BREATH AND LARYNX.

He did not stop his observation here, although he had succeeded in isolating apparent causes. He continued his observations of more than his head, breath and larynx and noticed that any use of his head and neck which was associated with the depressing of his larynx was also associated with a tendency to lift his chest and shorten his stature.

"This led me on to a long series of experiments, in some of which I attempted to prevent the shortening of the stature, in others actually to lengthen it, noting the results in each case. For a time I alternated between these two forms of experiment, and after noting the effect of each upon my voice, I found that the the best conditions of my larynx and

vocal mechanisms and the least tendency to hoarseness were associated with a lengthening of the stature. Unfortunately, I found that when I came to practise, I shortened far more than I lengthened, and when I came to look for an explanation of this, I saw that it was due to my tendency to pull my head down as I tried to put it forward in order to lengthen. After further experimentation I found at last that IN ORDER TO MAINTAIN A LENGTHENING OF THE STATURE IT WAS NECESSARY THAT MY HEAD SHOULD TEND TO GO UPWARDS, NOT DOWNWARDS, WHEN I PUT IT FORWARD; IN SHORT, THAT TO LENGTHEN I MUST PUT MY HEAD FORWARD AND UP. (My capitals.)

The experiences which followed my awareness of this were forerunners of a recognition of that RELATIVITY IN THE USE OF THE HEAD, NECK AND OTHER PARTS WHICH PROVED TO BE A PRIMARY CONTROL OF THE GENERAL USE OF THE SELF. (My capitals.)

When, however, I came to try to put my head forward and up while reciting, I noticed that my old tendency to lift the chest increased, and that with this went a tendency to increase the arch of the spine and thus bring about what I now call a 'narrowing of the back'. This, I saw had an adverse effect on the shape and functioning of the torso itself, and I therefore concluded that to maintain a lengthening it was not sufficient to put my head forward and up, but I must put it forward and up in such a way that I prevented the lifting of the chest and simultaneously brought about a widening of the back."¹.

His observation was therefore that THE FUNCTIONING OF THE ORGANS OF SPEECH WAS INFLUENCED BY HIS MANNER OF USING THE WHOLE TORSO, AND THAT THE PULLING OF THE HEAD BACK AND DOWN WAS NOT MERELY A MISUSE OF THE SPECIFIC PARTS CONCERNED, BUT ONE THAT WAS INSEPARABLY BOUND UP WITH A MISUSE OF OTHER MECHANISMS WHICH INVOLVED THE SHORTENING OF THE STATURE.

After this period he had his vocal organs inspected by medical friends and they were pronounced much healthier and stronger. He had therefore succeeded in his original intention of finding out the cause of his hoarseness during performances.

1. F.M. Alexander, The Use of the Self, p.8..

The details of this success were that he was now able to prevent his head from pulling back and down with the accompanying benefits to his vocal organs, he no longer audibly gasped for air, he had taught himself how to lead with his head forward and up without lifting his chest and narrowing his back and had applied all these new actions to his reciting. But he was not able to maintain these actions for long periods of time. As the mirror had been the only means of reminding himself of his newly acquired improved use of his body, he found it difficult to keep the old habits from creeping back into his performing. The old sensations began to feel right again, although he knew they were wrong.

This led him to the next important observation:

"...I thought this was merely a personal idiosyncrasy, but my teaching experience of the past thirty-five years and my observation of people with whom I come into contact in other ways have convinced me that this was not an idiosyncrasy, but that most people would have done the same in similar circumstances. I was indeed suffering from a delusion that is practically universal, the delusion that because we are able to do what we 'will to do' in acts that are habitual and involve familiar sensory experiences, we shall be equally successful in doing what we 'will to do' in acts which are contrary to our habit and therefore involve sensory experiences that are unfamiliar." ¹.

He spent months trying to solve this dilemma, but did not experience any enlightenment, although he slowly realised that his attempts to use the specific parts of the body correctly invariably involved the obvious accompanying acts of standing, walking, using arms and hands and so on. Using the mirror again, he noticed that his wrong use of his head, neck, larynx, voice and breathing organs also involved undue muscle tension in his legs, feet and toes. He had actually been told to "Take hold of the floor with your feet" in drama classes and he had thought he was doing it correctly. His observation now told him that he was not carrying out this advice correctly, but bending his toes downwards and arching his feet unduly, throwing his weight on

1. F.M. Alexander, *The Use of the Self*, p. 10.

the outside of his feet. He states "It gradually dawned upon me that the wrong way I was using myself when I thought I was 'taking hold of the floor with my feet' was the same wrong way of using myself when in reciting I pulled my head back, depressed my larynx, etc., and that this wrong way of using myself constituted a combined wrong use of my whole physical-mental mechanisms. I then realized that this was the use I habitually brought into play for all my activities, and that it was what I may call the 'habitual use' of myself, and that my desire to recite, like any other stimulus to activity, would inevitably cause this habitual wrong use to come into play and dominate any attempt I might be making to employ a better use of myself when reciting." ¹.

He worked with this realisation - THAT IT WAS NOT ONLY HIS TORSO HE WAS USING WRONGLY, IT WAS HIS WHOLE PHYSICAL MENTAL MECHANISM - and added the further realisation THAT AN OLD HABIT LIKE TAKING THE FLOOR WITH HIS FEET WAS INVOLVED WITH OPERATING THIS WRONG USE; and he added a further vital piece of information - THAT THE OLD HABIT WAS ACTUALLY A LEARNED HABIT AND WAS THEREFORE ALMOST IRRESISTABLE. (My capitals.)

This brought him to the next phase, which was to find a way of learning a new activity in such a way that this old habit did not invariably over-ride the new one. "If ever anyone was in an impasse, it was I. For here I was, faced with the fact that my feeling, the only guide I had to depend on for the direction of my use, was untrustworthy. At the same time I believed that this was peculiar to myself, and that my case was exceptional because of the continuous ill-health I had experienced for as long as I could remember, but as soon as I tested other people to see whether they were using themselves in the way they thought they were, I found that the feeling by which they directed the use of themselves was also untrustworthy - indeed that the only difference in this regard between them and myself was one of degree." ².

It was here that Alexander's determination to find solutions was so invaluable. He did not allow himself to remain in an impasse,

1. F. M. Alexander, The Use of the Self, p. 12.

2. Ibid., p. 14.

but refused to believe that the problem was hopeless. He said that he began to see that his attempt to solve his problems was opening up a whole new field of enquiry. "I HAD PROVED IN MY OWN CASE AND IN THAT OF OTHERS THAT INSTINCTIVE CONTROL AND DIRECTION OF USE HAD BECOME SO UNSATISFACTORY, AND THE ASSOCIATED FEELING SO VERY UNTRUSTWORTHY AS A GUIDE, THAT IT COULD LEAD US TO DO THE VERY OPPOSITE OF WHAT WE WISHED TO DO OR THOUGHT WE WERE DOING. IF, THEN, AS I SUSPECTED, THIS UNTRUSTWORTHINESS OF FEELING WAS A PRODUCT OF CIVILISED LIFE, IT WOULD TEND, AS TIME WENT ON, TO BECOME MORE AND MORE A UNIVERSAL MENACE, IN WHICH CASE A KNOWLEDGE OF THE MEANS WHEREBY TRUSTWORTHINESS COULD BE RESTORED TO FEELING WOULD BE INVALUABLE." ¹ (My capitals.)

When he thought further about his head and neck habits, he decided that the misdirection of his head and neck was instinctive and came into play as a result of a decision to use his voice. In other words, THE STIMULUS CAUSED THE MISUSE. So he went on to reason that when the stimulus came to him to use his voice, he could INHIBIT the misdirection. He would therefore be stopping off at its source his unsatisfactory reaction to the idea of reciting. His next step would be to discover what DIRECTION would be necessary to ensure a new and improved use of the head and neck in order to ensure a satisfactory instead of an unsatisfactory reaction to the stimulus to use his voice. He sets out in point form how he proceeded with this intention

- "1. To analyse the conditions of use present;
2. to select (reason out) the means whereby a more satisfactory use could be brought about;
3. to project consciously the directions required for putting these means into effect." ²

When he put this into practice he found that at the critical moment when he attempted to gain his end by means which were contrary to those associated with his old habits of use, his instinctive direction dominated his reasoning direction.

1. F.M. Alexander, *The Use of the Self*, p. 16.

2. *Ibid.*, p. 17.

Up to this point he had retained his faith in the idea that his reasoning abilities were stronger than his instincts and feelings; but he now discovered that his reasoning took him as far as the directing for the new use, but at the very point of carrying out these directions, he reverted to his old wrong habits.

He then focussed his attention on that moment of "doing" the new direction and came to the conclusion that he must concentrate only on giving the new directions without trying to carry them out. It is here that a student of the Alexander Technique may have to shed many preconceived ideas about learning skills and about education in general. Alexander actually spent months giving himself new directions without carrying them out and he came to the following conclusions:

- " 1. That before attempting to 'do' even the first part of the 'means whereby' which I had decided to employ to gain my end (i.e. vocal use and reciting), I must give the directions preparatory to the doing of this first part very many times;
2. that I must continue to give the directions preparatory to the doing of the first part while I gave the directions preparatory to the second part;
3. that I must continue to give the directions preparatory to the doing of the first and second parts while I gave the directions preparatory to the doing of the third part; and so on for the doing of the fourth and other parts as required." ¹

He calls this analysis of combined activity "all together, one after the other." If one thinks carefully about the process of learning singing, it is a very accurate analysis of a student's attempts to control breath expulsion, at the same time as a good mouth position, at the same time as a good stance and so on - these directions have to be "all together, one after the other" during the learning process.

He then went on to carrying out his new directions to recite, but, to his dismay, he found that he failed more times than he

succeeded. He realised that, although he knew otherwise, he was still relying on his accustomed measure of an activity feeling right, rather than on his conscious direction. "I had never fully realized ... that the sensory experience associated with the new use would be so unfamiliar and therefore "feel" so unnatural and wrong that I, like everyone else, with my ingrained habit of judging whether experiences of use were "right" or not by the way they felt, would almost inevitably balk at employing the new use.. Obviously, any new use must feel different from the old, and if the old use felt right, THE NEW USE WAS BOUND TO FEEL WRONG. I now had to face the fact that in all my attempts during these past months I had been trying to employ a new use of myself which was bound to feel wrong, at the same time trusting to my feeling of what was right to tell me whether I was employing it or not. This meant that all my efforts up till now had resolved themselves into an attempt to employ a reasoning direction of my use at the moment of speaking, while for the purpose of this attempt I was actually bringing into play my old habitual use and so reverting to my instinctive misdirection." ¹.

I quote this passage in full because the concept is of vital importance to a singer learning new skills and trying to change old and learned habits. The obvious example of this is the process of trying to learn new sensations for high notes - the new directions take some courage to attempt, the letting go feels unsafe, the body often tightens somewhere and the singer has to trust his teacher and this new, unsafe sensation to make progress. The old, over-controlled way inevitably feels much safer. The new way feels wrong in comparison.

Alexander worked out that his trust in his reasoning processes had to be a genuine trust if they were going to bring him safely to his "end", not a half-trust needing the assurance of feeling right as well. He continued to operate his previous directions "all together, one after the other", but changed his usual pattern of procedure in the following way:

" 4. While still continuing to project the directions for the new use I would stop and consciously reconsider my first decision, and ask myself, 'Shall I after all go on to gain the end I have decided upon and speak the sentence? Or shall I not?

1. F.M. Alexander, The Use of the Self, p.22.

Or shall I go on to gain some other end altogether?' - and there and then make a fresh decision,

5. either

not to gain my original end, in which case I would continue to project the directions for maintaining the new use and not speak the sentence;

or

to change my end to something different, say, lift my hand instead of speaking the sentence, in which case I would continue to project the directions for maintaining the new use to carry out this last decision and lift my hand;

or

to go on after all and gain my original end, in which case I would continue to project the directions for maintaining the new use to speak the sentence." ¹

This concentration on maintaining his new manner of use while giving himself the choice of whether or not to speak a sentence finally overcame his problem of the stimulus to speak also being the stimulus for habitual wrong use. He states: "...MY CONSCIOUS, REASONING DIRECTION WAS AT LAST DOMINATING THE UNREASONING, INSTINCTIVE DIRECTION ASSOCIATED WITH MY UNSATISFACTORY HABITUAL USE OF MYSELF." ² (My capitals.)

He adds that after working this way for a considerable time he also became free from the throat and vocal trouble and from nasal and respiratory difficulties that had bothered him all his life.

1. F.M. Alexander, *The Use of the Self*, p.23.

2. *Ibid.*, p.24.

THE CONCEPTS BEHIND ALEXANDER'S EXPERIENCE

Alexander spent sixty years evolving ways of putting into practice the concepts implied by his experimentation. Hence I did not have to face years of experimentation to apply these concepts to my task of changing and developing my vocal technique and artistry.

I was able to take Alexander Technique lessons from four available teachers and explore a wealth of literature on all aspects of the subject.

Use affects Functioning

Alexander emphasised that we have the choice, and therefore the responsibility, to control certain ways of using the body. If we learn how to control this use, the functioning of our bodies will improve and continue to improve. If we fail to exercise this choice, a poor manner of use will influence our bodies towards a continuous deterioration of our functioning. A classic example of this among singers is in the use of the shoulders during the act of singing. Many singers curl their shoulders forward and up when their breath is running out and when the pitch they are singing feels too high. This is poor use. It affects the functioning because the sound becomes thinner and the collapse of the chest eliminates potential chest resonance; the breath is constricted; the whole breath support system becomes effortful; the head tends to pull forward and makes access to head resonance more effortful as well. If the singer is ever to solve this dilemma he must learn to control this unnecessary interference in the production of his sound. Even a vestige of such interference will affect his sound adversely. Yet, once such a pattern of use is habitual, the singer must make the choice to struggle constantly against the habitual use, or learn how to eliminate it. In the process of eliminating such a habit, he will invariably come to the conclusion that he has to pay attention to the use of his body as a whole. It is the balanced use of his body mechanism that leads to the improvement of his use both general and specific.

There are many influences that lead to imbalance in the use of our bodies - injury; emotional trauma; life-style, mental attitudes, fatigue, pressure and so on. The tension built up in our muscles

from such influences is often retained long after the tense response is appropriate. In this way tension patterns become our habitual use and filter into daily activities as well as the use required for performances. This limits the repertoire of emotions the body can portray convincingly and eventually limits a performer's potential employment.

We often use tension as a means of protection against injury in all its forms. Once we make the choice to release this tension the body will allow these releases only when it is ready to do so. During the course of two years of Alexander Technique lessons I was very aware of tension in my leg/hip joint, but it was only after prolonged attention to the body as a whole that I experienced real release in my leg/hip joint. Just as I originally made the choice to start studying the Alexander Technique, so I made the choice to release my legs when they were ready to be released. Many people fear the loss of tension which they have built up as a protection, but in practice a student can only experience release when the body is ready and when the student makes the choice at each stage. Once we experience the benefits of making choices, our bodies become the responsive instruments required for the expression of our art.

Functioning as a Whole

Alexander started his experimentation with the intention of solving the specific problem of his vocal misuse. He discovered that he could only solve this by attending to more than the specific organs involved - the whole body was involved in his misuse of his vocal organs. He also went on to realise that disconnected use of the body implied disconnected functioning of mind, body and emotions. In the face of the growing specialisation of the twentieth century he taught that the human being functions as a psychophysical whole.

This concept is vital to singers and singing teachers. In the enthusiasm of making progress in the many facets of a performer's art, a singer can easily give priority to one aspect at the expense of the whole balance of the art. A teacher can become convinced that a certain aspect of technique is vital for every student and teach it at the expense of retaining the balance of the whole. This happens frequently and almost invariably, and the stronger the

singer's awareness of his whole functioning, the greater his protection against such temptation in his own practising and in his functioning under instruction.

Primary Control

Alexander used this term to describe the balanced relationship between head, neck and torso which he discovered was so important to his progress towards improving his use. It implies a tension-free balancing of the head on the tip of the spine i.e. the atlas balancing on the axis, rather than being held in a tension grip on the tip of the spine. This allows maximum freedom and energy in all the body's activities. It can be observed in young children whose bodies have not yet been distorted by tension and in certain fortunate adults who have retained this poise in activity.

Alexander maintained that this poise could be regained through a re-education of the general muscle use and understanding of the primary control. The primary control enables us to reach a balanced resting state from which the natural reflexes can begin to function as they should and any further activity takes on a new freshness and energy because it is taking maximum advantage of the natural flow of energy in the body. Alexander discovered that he could not operate this primary control by "willing" the muscles to work in a certain way. He had to allow the reflexes of the body to act or not to act. This is what he called inhibition and direction. This not only provides a way of reducing the interfering habits of our systems, but enables us to find a balanced state of rest from which to operate:

Debauched Kinesthesia

Kinesthesia is the conscious awareness of the movement and position of the body. The muscles feed back information to the brain, telling it what they are actually doing. Efficient kinesthetic awareness is dependent on accurate signals from the proprioceptors which are the tendons and joints of the body. Proprioceptors are activated by movement and do not necessarily operate at a conscious level. When engaged in learning a skill, we are operating our kinesthetic awareness, which itself is dependent on our proprioception. Proprioceptive information concerns the relative positions of the body parts in space, the rates of their movements, the forces they exert and the relative

times of their contractions.

Alexander discovered that his kinesthetic awareness was untrustworthy and that this was not individual to himself. This untrustworthiness meant that, not only did he have an inaccurate idea of what he was actually doing, but that the incorrect habit actually felt right. The corrupted kinesthetic sense is called debauched kinesthesia. It is characterised by an attempt at new use 'feeling all wrong'; by inaccurate perception of the amount of energy required to perform any activity; by fear of new ways of understanding activities; and by generally inappropriate habits and behaviour.

It is most important to realise that the phenomenon of debauched kinesthesia is the reason why we cannot teach ourselves the Alexander Technique. We need the guidance of a teacher to learn to perceive our activities accurately and only when the level of kinesthetic awareness has improved to an acceptable level of accuracy, can the student be regarded as self-sufficient. There is no standard measure of such a point, but the sense of process becomes evident as the student shows signs of improved activities.

Singing teachers are very dependent on their kinesthetic awareness for formulating accurate instruction and singing students are just as dependent on kinesthetic awareness for carrying out these instructions. It is very clear therefore that any improvement in changing debauched kinesthesia towards improved and accurate kinesthesia is bound to improve the rate of progress in the long term.

Inhibition

Inhibition is the word used to describe a moment of conscious thought between the reception of a stimulus and the response. There are two stages to learning inhibition - first, to recognise the habitual response to a stimulus; second, to learn to stop or inhibit that conditioned response. In an Alexander lesson the teacher gives the student an awareness of the habitual response, thereby teaching the student what needs to be inhibited. It is important that we understand that this is a process of regaining spontaneity i.e. freedom from habitual patterns, as opposed to other uses of the word inhibition. This facility of controlled inhibition is what distinguishes us from the animal world and Alexander believed that it is essential to develop this control if we are going to cope with

the fast changes of modern living. It is the learning of a more appropriate response to a stimulus that results from successful inhibition and leads to activity and behaviour more appropriate to the stimuli of our environment.

Direction

The best example of direction is Alexander's own direction to himself in all activities - "free the neck to let the head go forward and up so that the back may lengthen and widen." The important concepts in this primary direction are "free", "let" and "may". They indicate the sense of ALLOWING an activity to take place, rather than pushing, straining or "doing". This concept of "doing" or "non-doing" is very important for every Alexander student to learn. If we "do" a movement, the body stiffens in order to carry it out. If we think a direction, we allow a release to take place first, then allow the intended movement, which moves us in a certain direction. The example of Alexander's primary direction can easily be turned into a meaningless repetition of words by an inexperienced Alexander student because words can be repeated while the thought is elsewhere. The forward and up direction should be present in all activities while at the same time carrying out directions for improving the use of other parts of the body.

Means Whereby and Endgaining

Alexander re-educated himself, not by aiming towards a goal, but by looking at the details of the process by which he would reach that goal. This is referred to as the means whereby. Alexander discovered that, as soon as one attended to the desired goal (endgaining), habitual patterns would dominate. In order to inhibit this interference of habitual patterns, one needed to attend very closely to instituting new manners of use which would then accomplish the desired aim. Trying an activity repeatedly with poor use is pointless and harmful. It is necessary to stop, analyse the process, decide what is preventing the efficient functioning, correct the poor use in the process and in this way progress towards the goal. This endgaining can be seen in something as simple as reaching for the salt, without attending to appropriate muscle use for the activity, or even in the larger sphere of how to make choices in planning a career. Debauched or corrupt body use is just as destructive to the individual as corrupt methods to instant success used by "endgainers".

IV THE STUDY PROJECT

The study project was planned in three phases:

1. Pilot Project

I would undertake an intensive course of Alexander Technique lessons and record data on my condition before and after this course. The data would be related to the following aspects of my condition:

a) Physical Profile

A description of my general habitual manner of using my body standing and sitting.

Outlines of photographs designed to show this body use.

Measurements of my body by a qualified doctor.

b) Breathing Profile

A description of my actual breathing mechanism before and after a course of lessons.

c) Sound Profile

A description of my sound before the course of lessons, indicating the improvements I would like to make and a description of the sound after the course. Data would be based on my own subjective judgements at the relevant times and tape recordings of rehearsals and performances.

d) General Observations

2. Case Studies

Five singers - four from the Singing Department of the Conservatorium of Music at the University of Stellenbosch and one of my own students - would undertake a course of thirty Alexander Technique lessons one year later to be completed within a period of six months. Data would be recorded on their condition before and after the course related to the following aspects:

a) Physical Profiles

Descriptions of their general habitual manner of using their bodies standing and sitting.

Outlines of photographs designed to show this body use.

Measurements of their bodies devised by a physiotherapist.

b) General Observations

3. Application of Knowledge Gained from First Two Phases

A more detailed description of the fifth student, who was my own singing pupil, including data on breathing and sound.

Applying the knowledge gained in her singing and Alexander Technique lessons.

Conclusions.

The first phase was started on January 1st 1984. It was necessary to allocate a year to the gathering of information because I was the only local singer who had attempted to combine the skills of these two demanding disciplines. I had to establish with evidence that encouraging five other singers to combine these two disciplines was a responsible action.

The five students who generously offered to commit themselves to Alexander Technique lessons were shown the physical profile of my pilot project and were very interested in the breathing applications. They had to be willing to find the fees for half the cost of bringing the Alexander teacher from Cape Town to Stellenbosch once a week and to visit the teacher in Cape Town on Saturdays. They had to be willing to be photographed in leotards and to have their bodies measured. They kept regular diaries of their reactions to the course of lessons.

My tutor at the Conservatorium took the course of lessons herself and kept an eye on what effects, if any, the Alexander Technique lessons were having on her other four singing students. It was not practical to record data on her students beyond the boundaries of physical change because a singing pupil cannot be expected to cope with direction from two teachers. Follow-up study after the course of thirty lessons was also impractical because the students could not be expected to continue the level of time commitment when final year examinations were pending and they were all dispersing to take up new employment.

My own student, however, was employed locally and it was practical to continue the study with her co-operation. At the end of the first phase I was fortunate to have the opportunity to study with Beret Arcaya in New York and learn from her some of the ways in

which she had been using the Alexander Technique to increase the effectiveness of singing technique instruction. This meant that I had observed combined instruction in both disciplines being used effectively before the five case studies began their course of lessons. My own training as an Alexander teacher had started by this time and I had plenty of practical confirmation of my conviction that the Alexander Technique was a very valuable tool in the process of improving the art of singing.

One of the limitations of the project was that none of the local trained Alexander teachers had had experience of singing. At first, I found this unnerving, but, as time went on, I found that it forced me to articulate my intentions very clearly when engaged in carrying out a singing direction, either for myself or for a pupil. It had to be clear to both the pupil and the Alexander teacher who was helping me guide the pupil into better muscle use while actually singing. Later on, when my own training was more established, I took on this role myself; but the interim phase was most instructive.

The students on the case studies were also in need of articulate explanations of how and why the Alexander Technique was affecting them and my clarity in this sphere was forced to grow at a rapidly increasing rate. There was also the growing interest in the project from students outside the study project. When the initial thirty lessons were completed, four of the five students elected to continue lessons privately and were joined by music students and lecturers from other departments for the rest of the year.

Pilot Project

My motivation for analysing my condition was to continue to raise my standards as a performer by recognising and removing physical habits that seemed to be impeding my progress. As stated on page one these were:

1. My torso dropped while singing.
2. My arms were tense.
3. My jaw needed to be freer.
4. My lower back was not flexible enough.

Had I not been a professional singer, these symptoms of imbalanced body use may not have been particularly important to me because I was fit and healthy. But my habits of body use while singing were, in fact, exaggerated versions of the habits I employed in my general use. These were more noticeable as my voice grew in power and artistic demands became more varied. I also realised that I had employed these habits of body use throughout the period of training as a singer.

Working on Alexander's principle that the condition of the whole person is relevant to all specific improvement, with the help of my Alexander teachers and my singing teacher, I worked out the following descriptions.

Physical Profile

Head: habitually held slightly too far forward in relation to torso; pulled back on the tip of the spine.

Neck: muscles shortened.

Jaw: some habitual tension always present.

Chest: habitual narrowing and collapsing present in daily use.

Shoulders: slightly raised and rounded (incipient kyphosis); left shoulder held higher than right.

Spine: a pronounced convex curve of the lumbar spine.

Torso: twisted from left towards right (scoliosis).

Left Scapulae: higher than right.

Arms: held in slight tension; left arm hanging more forwards and away from the body than right arm.

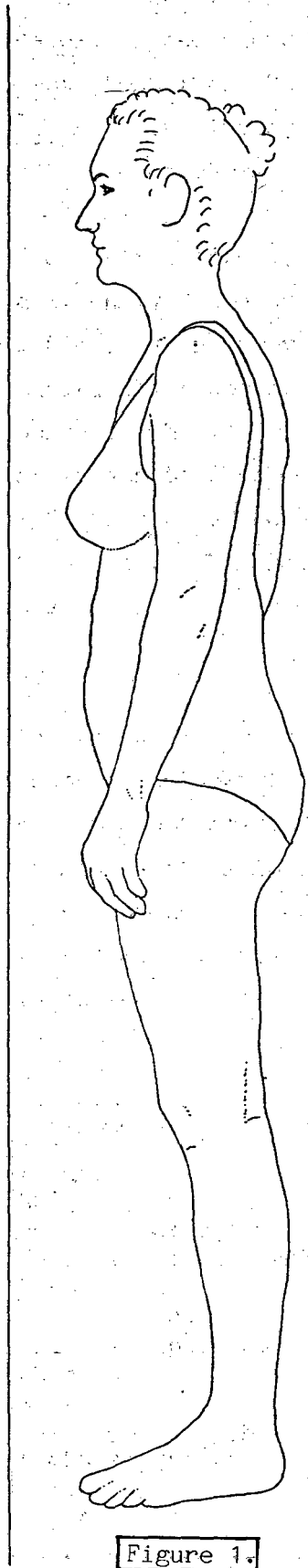


Figure 1.

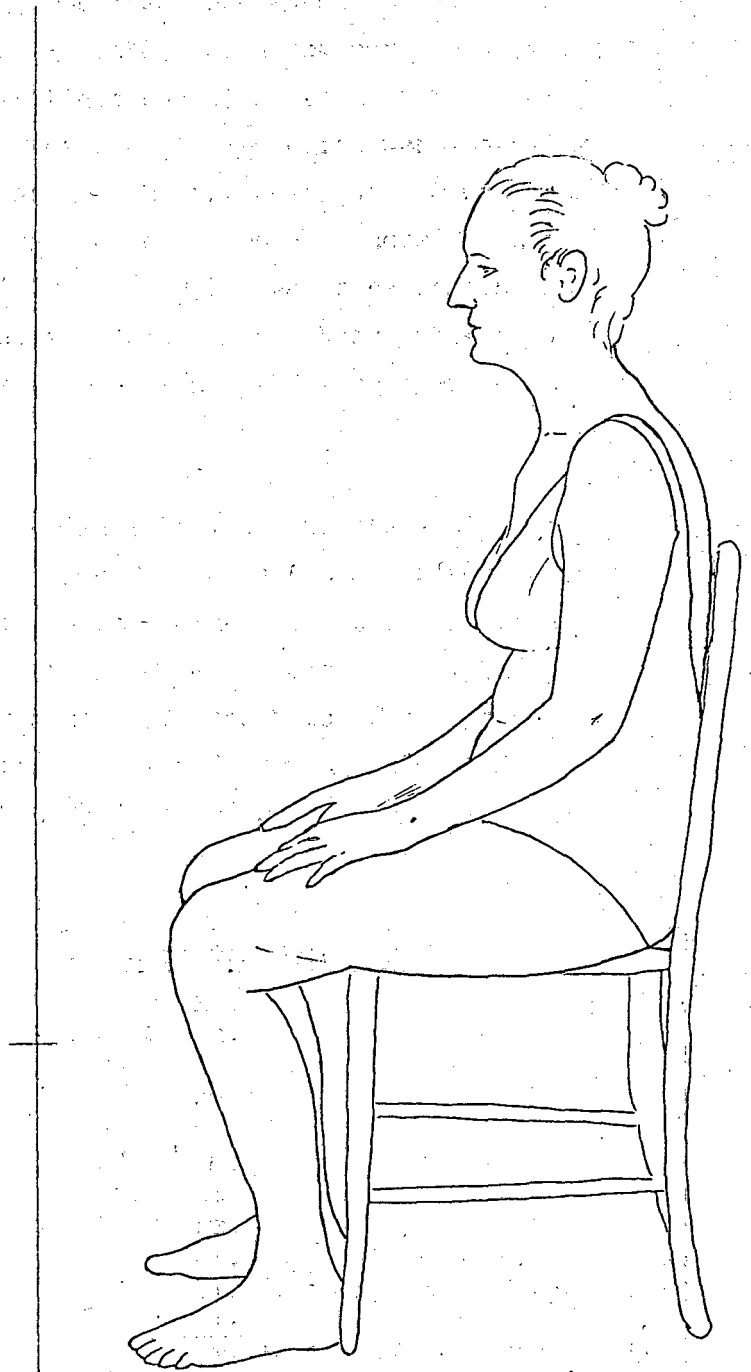


Figure 2.

Lower Back: over-contracted muscle mass in right lower back; shortened left side; thickened right side.

Pelvis: left side not aligned with left shoulder; pelvis dropped back and down.

Knees: braced backwards.

Feet: tense; not "connected" to rest of body.

Weight: distributed too far forward resulting in tension in feet and encouraging tension all over the body.

The overall effect, which can be seen in Figures 1 and 2, was a slightly depressed posture - nothing gross or particularly noticeable in everyday activities; but indicative of postural habits which became exaggerated when I sang, which were becoming worse as the years went by and which were perpetuating postural attitudes that belonged to past experiences and therefore not appropriate expressions of the feelings I was experiencing at this time. The photographs, from which these body outlines were traced, were taken 30 days before I started Alexander lessons.

The measurements had to be designed to indicate areas of physical change. Between the doctor, myself and the Alexander teacher, we could not predict exactly which changes were the most likely. We made certain choices, and from those results we devised a more thorough set of measurements with the help of a physio-therapist. We used those for the five following case studies. These measurements were taken 25 days before I started Alexander lessons.

Measurement	Taken on 9th December 1983
Weight	60.2 kg.
Height	168.0 cm.
Neck circumference	31.0 cm.
Shoulder width (back)	38.0 cm.
Ribs exhaled	80.0 cm.
Ribs inhaled	88.0 cm.
(actual expansion)	8.0 cm.
Chest	98.0 cm.
Waist	78.5 cm. (just above navel)
Left arm stretch	211.5 cm. (flat heels to fingertips)
Right arm stretch	213.0 cm.
Left leg	86.0 cm. (lying down, measured from
Right leg	86.0 cm. superior iliac crest to
	medial malleolus)

Table 1.

Breathing Profile

A close examination of my singing technique inevitably involved an analysis of my breathing. I had never suffered from shortness of breath and had relied very heavily on the sheer capacity of my lungs to cope with the longest phrases. To tell the truth, I had always been rather pleased with my breathing capacity. So, it was not easy for me to accept that I needed to re-examine my breath control. I was therefore comforted to read in Lilli Lehmann's book "How to Sing" that she breathed out by gradually relaxing the abdomen for twenty-five years before deciding that she got better results by relaxing the abdomen before she sang. "Undoubtedly I took in too much air in breathing, cramped various muscles, thereby depriving my breathing organs and muscles of their elasticity. I often had, with all care and preparation for inhalation, too little breath, and sometimes, when not giving special thought to it, more than enough. I felt, too, after excessive inhalation as if I must emit a certain amount of air before I began to sing. Finally I abandoned all superfluous drawing in of the abdomen and diaphragm, inhaled but little, and began to pay special attention to emitting the smallest possible amount of breath, which I found very serviceable." ¹

I learned from this, not a blue print for ideal breathing, but the principle of examining what you are actually doing with your breath control at all phases of your career, and deciding if it is suitable and achieving your desired results. I was actually doing the following:

Ribcage: the muscles round the ribcage (intercostals) were strong but tight, rather than flexible.

Chest: breast bone (sternum) pulled down on to diaphragm while singing.

Diaphragm: tight rather than flexible - indicated by hardness of stomach wall (epigastrium).

Lower Back: using the lower back rib muscles entailed a pushed outward tension that was difficult to maintain.

Lower Abdomen: tended to push in a little while singing and was not particularly flexible or well-toned.

Focus: main attention on the epigastrium for support.

Intake: sometimes audible.

Sound Profile

My early training had been as a mezzo-soprano, but it soon became clear that there was a much brighter timbre in the upper register and I had been singing lyric soprano for about six years. At this stage I felt that the warmth of the middle register should be retained and I wanted to keep this fullness of tone as high in the upper register as I could. For this I needed better understanding of breath control and energy input. If I could achieve this, the potential of my voice was what the German "fach" system categorises as lyric coloratura.

The details of my vocal technique training at this stage are difficult to put into words, but there were specific tools I wanted to learn to control.

Middle register: with my intention of keeping the warm tone, I was inclined to let the voice fall too far back in the placing and return to the thicker mezzo-soprano sound I had started using in my early training. I was trying to avoid this habit, while still retaining the quality of the middle register.

Upper register: the range from E natural to A natural was the most expressive part of my voice; B flat and B natural were powerful notes and Top C natural was inconsistent; C sharp to Top E natural were reasonably well placed in staccato exercises and coloratura runs. I wanted consistency in this area.

Chest register: I had no difficulty retaining middle register down to middle C and I mixed middle and chest registers to low A natural. On A flat I tended to break into pure chest register. I found that I lost the facility with mixed register on low A natural with the tension of performances and I wanted to be able to control my voice at this range.

Vowels: because my "ah" vowel was still inclined to be placed too far back, the placing of all the other vowels was not consistently in the front of the mouth. I wanted to bring all the vowels forward without becoming nasal in tone and felt I needed the help of improved breath control to achieve this.

Consonants: these became slightly indistinct when I wanted a legato sound. They were clearer in quicker passages.

Legato: I had always worked hard at maintaining the line of my voice, but I could still hear a slight stopping of the breath and lessening of support in the more difficult passages.

Balance Control: I was beginning to realise that my concept of how and in what direction I was channelling my breath was very important when it came to decide how and where I was intending to place my sound. In other words, I was getting the direction of breath muddled up with the direction of sound. This happened when I was thinking concentratedly about the exact nature of my directions, but, of course, in performances the emphasis of my directions was on the music. I was so keen to make maximum use of the projected resonance of the head that I think I was directing the sound too energetically into the head, with the result that some breath was going with it and slightly affecting the purity of the resonance. I needed to learn how to reach the balance of directing breath through the mouth and allowing sound into the resonating cavities at all times.

General Observations

Although I was playing sport and keeping up fitness exercises, I became very tired after my singing practices. I felt that my technique must be too effortful and that I must find greater ease in producing my voice.

In September 1983 I twisted my lumbar spine and decided that I should learn how to look after my back better. I also had been doing a lot of driving and found that I had a recurrent dull ache in my right back hip. I also had recurring pain in my right leg/hip joint. I was constantly easing creaks out of my left shoulder blade area and was aware of constantly fighting the habit of raising the left shoulder while singing. My heels were almost always numb.

Since I had been a teenager, I had been told that I had a slouch, and I had always wanted to walk and stand well. I held myself "well" in singing lessons, performances and photographs, but this didn't really answer my need for generally better poise. The posture I was holding for Figure 1 was my current idea of standing my best for a photograph. I was more than ready for making some changes.

MY OWN EXPERIENCE OF THE ALEXANDER TECHNIQUE

The practicalities of combining singing with the Alexander Technique now had to be solved. I was living and working within Cape Town but my University was a long car journey away from the only available Alexander teachers. I wanted to be able to examine my actual muscle use in singing and Alexander lessons as closely juxtaposed as possible. I therefore included singing technique lessons with the vocal coach at the opera house and submitted regular reports on the progress of my early attempts to combine Alexander Technique and singing to my tutor at the University. I was taught and advised by one of the Alexander teachers in Cape Town and a visiting teacher trained at the Constructive Teaching Centre in London during the first six months of the project. I started with six weeks of intensive Alexander Technique lessons in January 1984 and incorporated the singing lessons in the middle of February 1984.

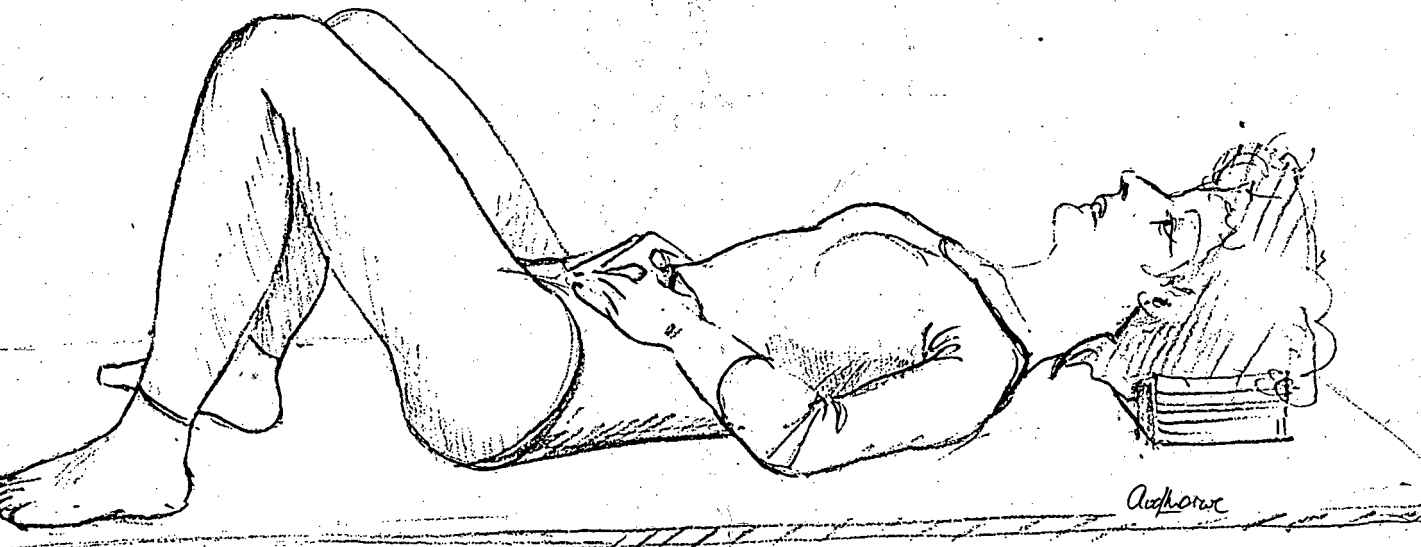
There is very little action in an Alexander Technique lesson, but it would be helpful to outline the nature of the few movements that can occur so that it is clear in the following account of my course of Alexander Technique lessons.

Standing: an Alexander lesson usually starts with learning awareness while standing. The student stands in front of a straight-backed chair while the teacher stands next to the student with one hand on the student's lower back and the other on the stomach wall. Then the teacher moves his hand to a point between the shoulder blades at the back and on to the upper chest in the front. After a few minutes he moves his back hand to the back of the neck and his front hand under the chin. This is not the only way in which to learn about distributing the student's weight equally across the feet and letting go tension in the back and stomach, and releasing tension in the neck, but it is a typical approach to the start of an Alexander lesson.

Sitting: the teacher then guides the student into the chair, asking him to pay attention to his neck muscles, or his lower back, or his knees, or the bend at his hips, and so on, slowly learning places to release tension while sitting down. This can be done more than once. The student is also guided for standing up again,

probably being asked to pay attention to leading forward and up with his head, or feeling energy going up in front of his torso, or allowing the knees to move forward and away from each other. There are many variations of directions that are required for each student at different stages, but these are again typical directions.¹

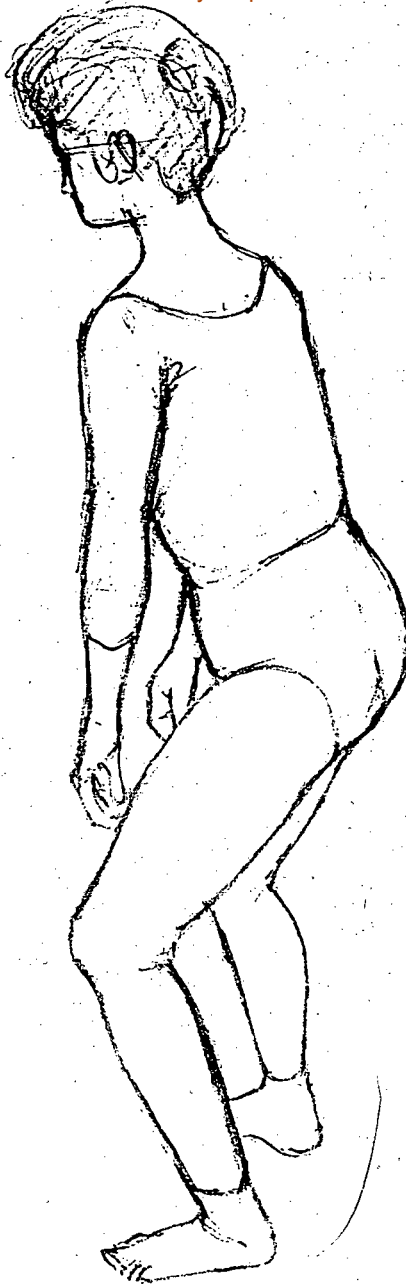
Illustration 1



Lying on the table: most teachers have a table on which the student lies on his back, hands resting on the front of the torso, knees bent pointing to the ceiling, weight of legs resting on feet. In this position the muscles have the help of gravity to allow releases and the teacher can help the student to lengthen and widen all over the body. The arms and legs are gently moved by the teacher, sometimes taken to their full length. The head is encouraged to lengthen out of the shoulder girdle and so on. There is no end to the variations of movements for this stage of a lesson.

1. For the purposes of visual clarity, leotards were worn for these life drawings. Ordinary clothing is worn for Alexander Technique lessons.

Illustration 2.

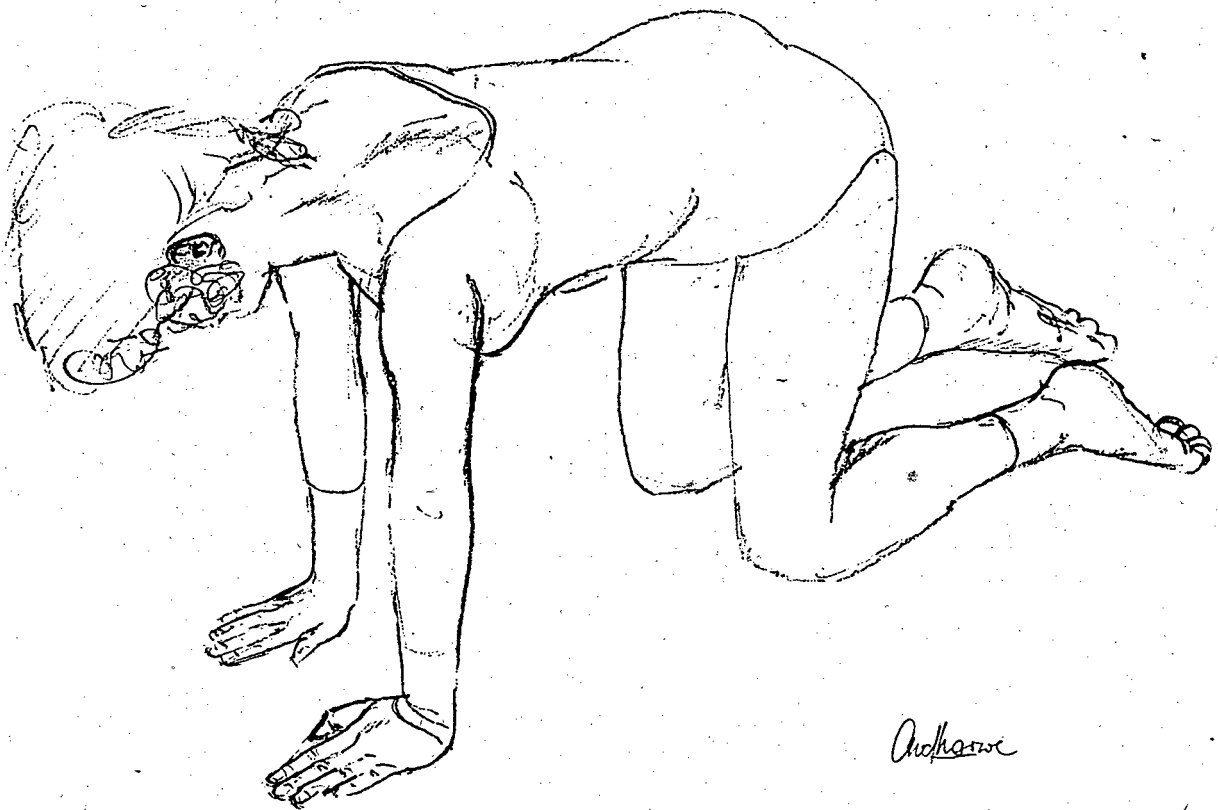


"Monkey": there is a position between sitting and standing called "monkey" which is named after its appearance - the arms hang freely on either side of the body, the ankles, knees and hips are bent and the torso remains wide and lengthened. Alexander described it as the position of greatest mechanical advantage. It takes the average student a great deal of practice to become released and free in all the joints of the body and still allow width and length in the torso; but it is a very useful position for attempting to learn another skill when it is necessary to stay free in as much of the body as possible.

Hands on the back of the chair: the student stands behind a straight backed chair and goes into a "monkey" position. He then gently places his hands on the back of the chair, fingers in front, thumb behind, letting the tension release in the hands and the weight of the arm go into the elbows.

"Whispered Ah": in any of the above positions the student can be taught "whispered Ah". The tongue rests in the bottom of the mouth; air is allowed the empty out of the lungs; the lungs then refill, allowing air right into the lower back of the lungs; the student imagines something slightly amusing so that his eyes smile a little; he allows the air out with an audible "ah".

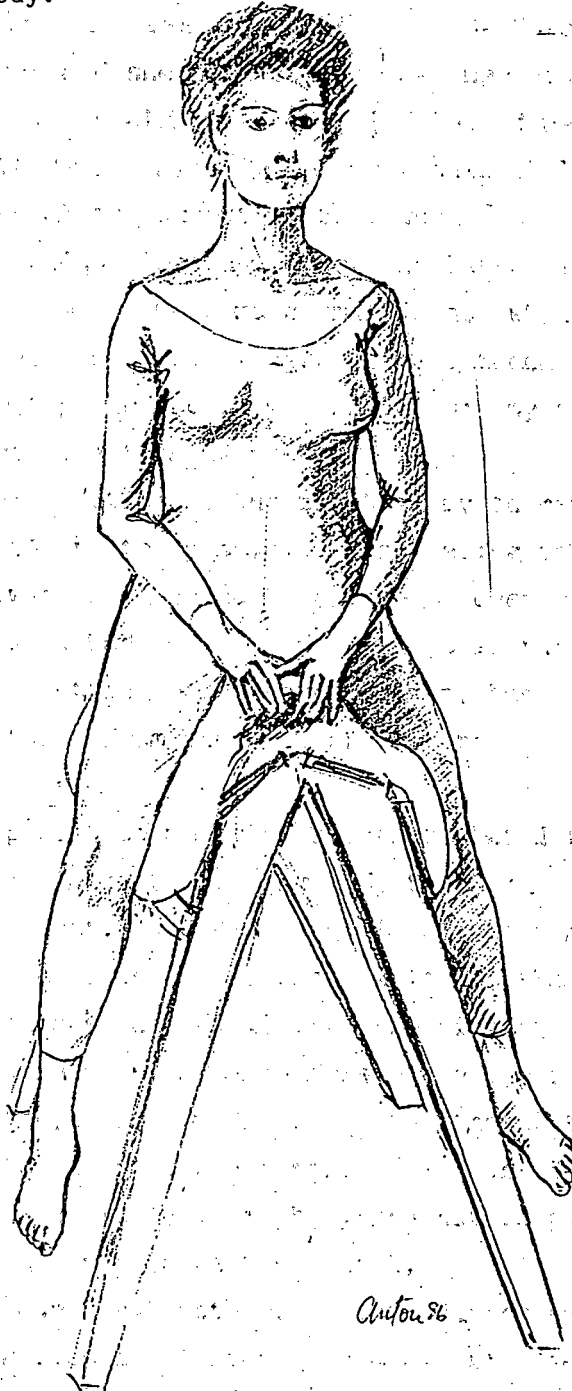
Illustration 3.



Crawling: this is by no means a part of every lesson, but it was included in all the case studies' thirty lessons. The student goes down on all fours and lengthens and widens his torso, distributes his weight so that his hips do not drop excessively from side to side and synchronises his hands and knees in a very slow crawl.

The horse: sometimes the student is asked to sit on a horse's saddle which rests on a wooden frame high enough for the feet to be off the ground. He rests his weight on his sitting bones and allows his energy to go up his torso. This is a good position for working on leg/hip tension and there are many variations for releases throughout the body.

Illustration 4.



These then are some of the most repeated movements during the following Alexander Technique lessons. Each teacher has his own successful variations and each student responds to different directions in his own individual way. Naturally the student has some choice in the matter of which position they prefer - most enjoy lying on the table, but a few refuse to do so; many do not like the horse and so on.

ALEXANDER TECHNIQUE - LESSON 1

At this first lesson we started with standing and sitting and then standing up again. In the process my teacher tried to help me to raise the front of my thorax and drop the back. Then I was taught to release into my sitting bones which seemed to work quite well but there seemed to be an uncertain area in my lower back. It was described as a "block in the middle of the thorax" and she said that it was her aim to make me work as a whole. I was also told that I released well in certain areas and that it was hoped that this ability to release would be general throughout my body when I had had enough Alexander Technique lessons. When the lesson was over I found that my walking steps were much smaller and when I was driving there seemed to be a much longer space between the base of my neck and the top surface of my shoulders; my shoulders seemed to be hanging more from my neck.

N.B. This description of the block in my thorax seemed to relate directly to the problems I was having in my singing lessons. I was being asked to extend my energy up and down in my body. This I had not been able to do as there was a definite resistance to getting more energy from my back and more elasticity for the breathing from the back of my ribs.

LESSON 2

It became apparent to me in this lesson that I tended to depress my larynx when I wasn't thinking. My teacher suggested that I opened in my chest. At this point I felt strange sensations in the top of my arms and my teacher explained that it was a tingling which was the result of increasing circulation. She said I tended to bring my shoulders round and depress the whole front area of my thorax. She suggested that I think into my back where she had placed her hand. She wanted me to fill in my back from the middle of my body and not to push the middle of the back outwards against her hand.

We then made our first attempt at introducing some singing into the Alexander lesson. I sang a humming exercise which I later listened to on tape and decided that it was somewhat effortful and pushed. When I had finished my teacher asked me whether I was intending to stiffen my arms while I sang. When I explained that I did not intend this she said that this was an unnecessary use of energy. After this she suggested that I walked with her holding my arms to prevent me from stiffening them while I walked normally.

N.B. I learned several things from this lesson that I could relate to singing.

1. I became aware that I depressed my larynx and learned that one of the ways of solving this was to open up some space in my chest. In other words I was becoming familiar with the idea of releasing tension in one part of the anatomy by allowing a release in another part.
2. Releases increased blood circulation.
3. I had to learn to release the middle of my back rather than pushing it about.
4. I learned that my arms stiffened while I sang.

This was what we called an INTERFERENCE. This interference was obviously present in my singing but there were also signs that it tended to interfere with my walking and other movements as well.

LESSON 3

My teacher asked me to think up in my torso, drop my nose, release my weight downwards, and just let it happen rather than doing it or pushing it. She asked me to allow the movement down into the sitting bones and the movement up to be simultaneous. I tended to pull my shoulders back rather than let the releases happen. I also tended to overdo the up energy and ignore the widening process that has to go on at the same time. I was then taught the half-sitting position that the Alexander Technique teachers call "monkey". It was explained to me as a process of allowing freedom at the back of the neck, releasing tension in the front of the ankles, allowing the knees to go forward and away and bending at the hips. I was also taught the "whispered ah". This was explained to me as emptying the lungs, releasing tension all the way through the body, gently letting the air out of the lungs on a "huh" sound. It was described as a very gentle process not to be associated at this stage with my singing breathing. Again I had to be careful not to do too much but to allow it to happen.

I also had to rest my tongue along the bottom of my mouth against my lower teeth when I breathed out and just allow the inside of my mouth to lengthen and widen.

We then started singing again and this time using a chair. I stood behind the chair with my feet fairly wide apart. I sang a five-note exercise up and down on an "ah" vowel. It was rather a tight covered sound. My teacher said I was cutting off my energy in the middle of my back. She suggested I thought back into this area and thought of my feet on the floor without wiggling my knees. I explained that my knees didn't quite know where they belonged. She suggested that I should not worry too much about the singing but just concentrate my awareness on her hands. In other words, think about her hands rather than about the singing. I took the exercise up to top B flat and back down again to bottom A. It became very resonant as the exercise continued. We noticed that I had a tendency to come down in the front and up at the back when I was executing a downward interval. She suggested that I tried overcoming this in an easy part of the voice. She advised me to centre myself and think into the floor. When I did this she observed a much nicer flow in the sound and that I did not break in the middle of my back. At this stage I had actually stopped listening to the voice and was concentrating on the way in which I was using my body. My teacher also observed that I was no longer tensing my shoulders in a certain direction but that when they moved it was part of a flow in the sound. She said that it seemed to be more like a sway going instead of a tense jerk. There was an up and down energy that felt fine and there was no sense of blocking things off. When we had finished this particular exercise, she asked me if it was tiring. My reaction was that I was fairly tired but that I felt less tired singing with my concentration on body energy than singing with so much concentration on the sound of my voice. My teacher commented that this was the first time that she had taught a singer and was amazed at how much more sensitive the body response is than for the average Alexander Technique student.

N.B. The observations of my singing activity in the lesson were very valuable.

1. The "monkey" position can be used as a total release of the body in preparation for singing activity.
2. The "whispered ah" can be used as a way of releasing the breathing muscles and opening the throat preparatory to singing activities.
3. Gently resting my hands on the back of the chair was a way to discourage the arms from stiffening and taking part in the production of sound.
4. Thinking of the mechanisms in my body left my voice more free than if I was focusing my attention just on my vocal sound.
5. Having the Alexander teacher's hands touching a muscle that I was intending to use in a new way, increased my awareness of how I wanted to use that muscle.
6. I became aware of a tendency to go down physically on to downward intervals and this was something that I wished to change.
7. Centering my balance and thinking my feet into the floor was very helpful as a base for increasing my energy flow.
8. I had the encouragement of realising that I was learning to overcome energy blocks and that I had a naturally responsive body mechanism.

LESSON 4

At this lesson I learnt an interesting piece of new advice - I had been putting my neck and head slightly forward and my teacher suggested that I "put my face back into my neck" a little which was a very helpful piece of imagery. Again I had a strange sensation above my elbows like pins and needles which made me feel as though my arms were going to drop off. It was not an entirely pleasant sensation. In my sitting and standing I became aware that pulling the muscles short in the back of my neck could cause me to flop onto the chair when I sat down because it detracted from my balance. We worked on this by thinking the weight into my sitting bones, allowing the teacher to guide me to sit, letting go tension in my legs and resisting the temptation to push my bottom out to place it on the chair. This was described as an interference. In order to stand up my teacher suggested that I just imagined myself standing. The result was very free and easy.

She explained that I had reached an interesting stage in Alexander Technique when I was beginning to anticipate the movements instead of allowing her to do it. In the beginning the student cannot do this because he does not know what to expect. I also felt that the changes of use in my muscles were making their presence felt by little aches and pulls all over my body. I then enabled myself to let go in the knees and to allow myself to go forward from the hip joint at the same time with the head forward and up in order to sit down. But then I remembered that I had to sit on the chair so I interfered and did the movement in two sections.

I prepared to sing again with my hands resting on the back of a chair and I sang a Puccini aria. I noticed that the times when I wanted the shoulders to go down at the back and the front to go up were the very times when I habitually tried to do exactly the opposite. I could feel that if my teacher's hands had not been placed on my shoulder blades, that the shoulder blades would have risen quite high. I also became aware that my ribcage was falling in as I was singing. In my early singing lessons I had been taught to hold my ribcage outwards and push it out away from my body during singing. In this lesson I realised that this was an exhausting procedure. Apparently, when I started doing this the muscles round the ribcage were stiff and hard but as I continued the movement became freer and the sound more flowing. But this did not happen if her hands were not on my ribcage - as soon as she removed her hands I became fixed again. She suggested that, whatever my intentions with ribcage movement, it would be desirable for the muscles to remain pliable even when they are extended. I explained that I had been trying to get this elasticity in my own practice with the result that I managed to get a sound connection as if by accident with the soft palate. I became aware that I had consciously created a connection that I knew to be desirable. My teacher said that she was not concerned about my singing technique because I was probably working correctly if my muscles were not fixed when I had finished singing. I noticed also that during the sitting work I was aware that

my jaw was much looser than usual.

N.B. I learned several new things at this lesson as well.

1. Visualisation: We used this twice during the course of the lesson. The first time to put my face back into my neck and the second time to imagine myself standing up. It brought home to me the power of visualisation as a force to change muscle habits. It also helps to imagine whole movements instead of getting caught up in separate movements.
2. I realised that I wanted my shoulders to go down at the back and the front of my torso to go up, but because of my over-riding habit, I was actually doing the opposite of what I intended. This was my first experience of doing the opposite of my intention. It is a common problem amongst singers.
3. I had my first experience of examining a learned old habit. This was holding my ribs out for the full extent of a phrase. I had been working on getting flow into my ribcage and this habit was standing in the way of that flow. Yet I found it very difficult to stop doing this because I had been taught it as a valid method of breath control very early on in my singing training.
4. I created for the first time a conscious connection resulting from improved use of my ribcage muscles. This was to be the first of many successful conscious connections that were to help my singing technique.
5. The concept of being fixed or holding residual tension in muscles after singing activities became a very important one to the process of learning muscle release and its value in leaving the muscles ready for further action.
6. Having had a great deal of trouble loosening my jaw for singing, I found this new awareness of looseness in the jaw very encouraging.

LESSON 5

My teacher was amazed that my muscle spasm in my right middle back had already flattened out to a remarkable degree in the previous four lessons. She decided that at this lesson she

was going to work a little bit more concentratedly on my head/neck/torso relationship so that I got used to having her hands on my head and neck while attending to my use in the rest of my body. She said this was not usually done in an Alexander lesson but she wanted me to get used to this so that she could hold my head and neck while I was singing.

I told her that I was finding concentration rather tiring and she said that I should try to just allow the releases to happen rather than thinking that I actually had to do something. She pointed out that intensive Alexander work is in fact exhausting because the body changes so rapidly that you cannot really keep pace with the changes. The muscles start to work in a different way and obviously the muscle tone is not sufficiently developed to maintain the new use for long periods.

She asked me to think my weight into my heels. I pointed out that one is not normally asked to stand back on one's heels in a singing lesson or to perform. She said that it was a question of distributing the weight between the ball of the foot, the outside of the foot near the little toe and the heel. Thinking weight into your heels is a corrective rather than a descriptive balance. I was relieved to hear this because I said the knees tended to lock if I tried to stand fully on my heels. She said that it was a question of being more aware of one's heels so that the front of the ankle could open up more and it released the top of the foot.

By this stage I had been experimenting with the idea of my face going inwards and had been finding that it made a lot of other things easier. My teacher said that it fed right back all the way down to my heels and that she could see it happening.

She reiterated the possibility that the Alexander Technique was very likely to cause what felt like a chaotic jumble for a little while but she assured me that it would also start to unravel itself. I then remembered that after my third lesson I had actually felt very confused.

At this point I informed her that I had been asked to do an audition over the forth-coming week-end. She immediately observed that I had tensed up my left shoulder and that I should try and release it. Her reaction to my comment about the audition was that I was at a transition stage where I was letting go of something and going into something new.

We then started some singing - I sang The Czardas from "Die Fledermaus" - which showed signs of strain and a little bit of wobbling at certain points. My teacher observed this for a while and then asked me to stop singing. She said that the left shoulder did an incredible amount of work while I was singing and that was why it was more developed. I kept going over the front of my body with the left shoulder and she asked me to sing while being very aware of that fact. I then carried on singing. I completed the aria and she said I had inhibited that action a great deal by being aware.

I had been bothered by a slight rattling sound in my throat at the top and I asked her if she had heard this. She had and I explained that it felt as though I was wanting to open the voice i.e. the throat, but it felt as though something was hanging on in the throat. I commented that my energy felt a little bit down at that moment but she said that she definitely felt that I was not pushing at the voice which is something that always worried her when listening to singers. She felt that I was getting a looseness between my shoulders and my hips because letting go in the shoulders was enabling my hips to drop.

N.B.. There were several interesting points relating to my singing emerging from this lesson.

1. I began to feel the significance of retaining a good head/neck/torso alignment while singing. Although this was a long-term project and needed a lot of courage to operate, I found it very comforting to have somebody helping me towards that sense of freedom.

2. The question of weight distribution had always bothered me. Books on singing technique sometimes advise that the weight is distributed in the front of the feet, but I had discovered that this made the back rather tight and this description of allowing a distribution between the front and the back of the feet actually solved the problem for me. It was obviously wrong to have all the weight on the heels and allowing the distribution between the front and the back was ideal for the whole body.
3. The decision about whether to undergo an audition at this stage emerged during this lesson with particular reference to my current sense of exhaustion. In view of what happened at the forthcoming audition, I found it interesting to realise with hindsight that the information for my decision was contained in this fifth Alexander lesson.
4. The importance of awareness was illustrated very clearly to me when I had my excessive shoulder action pointed out to me and then went through the process of inhibiting to a certain extent this action while singing.
5. Protesting rattles in the throat on high notes were not very frequent in my singing but they had happened to me from time to time. In the past I had always reacted to such sounds with something not short of horror, probably because I was afraid that they would happen during performance. My reaction to the rattle in my throat on this occasion showed a different approach - the new space in my neck and throat was giving me an instinct for a wider throat space for the upper notes but the muscles in my throat were hanging on to tension habits that were associated with that pitch in the voice. In other words I began to realise that throat protesting could actually be heralding a new level of command over the space in the throat.
6. Effortful singing also came under scrutiny in this lesson. I felt that the new space between my shoulders and my hips was a loss of effort and at this point I interpreted it as feeling "down" in the body. But my teacher pointed out that I had in fact let go some of the effort in the middle of my body that had been producing the sound.

THE AUDITION

I was persuaded to do this audition against my own better judgement. I had two day's break between my fifth and sixth lesson and on the day before the audition I felt as though my sound had no energy. Later on in the day, I picked up some energy and felt as though I was making some new and better sounds. But on the day of the audition the temperature was 34 degrees centigrade and the pressure of performing under the circumstances of my current muscle change worked against me in my efforts to control two very demanding arias. I learned a few hard lessons from this experience.

1. That I had ignored the information contained in my last Alexander lesson about the state of my body and its current readiness for pressure.
2. That I had underestimated the power for change that was contained in only five Alexander lessons.
3. That I had now been forewarned that intensive Alexander training should not be undertaken when a performer is anticipating a pressured schedule.¹ In his article, "A New Field for Enquiry" Frank Pierce Jones describes how he felt "glued to the spot" when F.M. Alexander asked him to move without interfering with his neck tension. This happens regularly in the first few Alexander lessons and there were many instances in my pupils' singing lessons when the singer could not sing at all because we had only just removed a habitual interference like raising the shoulders or lifting the arm. If we have learned a skill in a tense manner, we have to relearn the skill because our co-ordination has been based on the presence of tension.

LESSON 6

We began by discussing the problems I had encountered in the audition. It was important that I understood the reasons for the temporary loss of control; so that I did not imagine that the same problem would become a regular part of auditioning and add to my anxiety over auditions. My own reaction, even while I was singing, was that I could already tell the difference between how I was singing before and how I might sing, if I established a better relationship between my breathing and my head tones. I felt during the audition that I had to work for every note and that the mechanism to carry out that

1. F.P. Jones, THE ALEXANDER REVIEW, "A New Field of Enquiry", 1986, vol. I no. 2, p.11.

work had failed me.

My teacher then worked on sitting and standing and suggested that I think more about the chair and sitting on the chair itself. She said that if I allowed myself to go on to the chair I would realise just how much I had been holding on to myself without actually sitting down.

My teacher then observed that I seemed to have a loose outer cover of muscle i.e. the top muscles were quite free. The inside muscles were still tense or tight. She said that she could see that we would have to loosen up the deeper layers of muscles around the ribcage if I was to achieve complete elasticity. We then did some singing on a staccato "o" vowel which spread in focus rather too much on the top A. The voice seemed a little too heavy for this exercise. While I was singing my teacher said that I should open my chest and think right into my feet. She said I had changed miraculously since the previous week in terms of tensing my shoulders. She also pointed out that now she had noticed that I needed to keep the front and the back of my body working as a whole rather than one going in one direction and the other seeming to tense up in another direction; I must think more carefully about the front and back working together. I suggested that I might have over-corrected the rising in the front and the dropping in the back for the purposes of singing. She said I had a tendency to over-correct.

The other interesting observation was that I changed a great deal between lessons. She noticed that I was different each time I came for a lesson even after one day's break.

At this point we discussed the question of the singer's own attitude towards auditions. I described how my attitude was nearly always one of extreme nervousness, even to the point of nausea, and that I felt that it was time I put some thought into developing a more constructive attitude. I had read that Alexander Technique helps people to face new challenges and I was looking for this possibility emerging from the work I was doing.

N.B. There was some very interesting information contained in this lesson.

1. Effort: even under the pressure of the audition I was aware of wanting to make a certain level of effort in order to reach my head tones. However, my recently re-educated breathing system did not allow me to put in that level of effort and I kept trying to make my body work for every note. This was my first inkling of the fact that head tones do not need to be achieved with effort in the head but are the result of mental direction. Without actually understanding it intellectually, my body was already re-channelling the effort into more appropriate parts of my anatomy.
2. Application of the Alexander Technique to singing:
My teacher strongly advised me to allow this aspect of my work at this stage to grow on its own. She said that once I had the feel of the Alexander in my normal movements, the connections and applications would emerge of their own accord; it was not necessary for me to hunt for them at every single turn. I bore this point in mind when we started on the case studies. During their first thirty lessons they were not asked to make notes about how the Alexander was affecting their singing, but rather how the Alexander was affecting them generally.
3. Constructive reaction to experience: the influence of constructive advice at this particular stage of my work was of crucial importance to me. If I had not had my Alexander teacher available to discuss an unsuccessful audition, I might have been tempted to take a far less positive view of what was a somewhat confusing experience. In the past I had reacted to experiences that did not turn out how I planned by a mixture of negativity and positivity. It was important to me that I wrote down this advice and it became a much more regular feature of my reaction to experience to follow this advice - "there is a lot of information in this experience for you".

4. Deep layers of tension: this was a new concept to me although it sounds like pure common sense. If I was treating my muscular activity as surface activity, then it was obviously true that I was not penetrating the inner layers of muscle activity which were crucial to achieving a central core to my breath support.
5. Front/back split: this must also have been the result of a mental attitude towards my body. I have since found that there are many singers who look at their breathing system from the front, purely because the front is visible to them. It is also more easily visible to their teachers. It results in relative inactivity for the back of the breathing system and overloads the front action. In the long run this is not a healthy balance for the body.
6. Over-correction: This is a common problem among keen and energetic singing students. At a singing lesson, under the teacher's guidance, the student learns to master a new concept. After about three days practising the new concept is over-emphasized and, to the student's dismay, the new ability disappears. The same happens with muscle re-education in Alexander Technique. This was not therefore my first experience of suffering from over-correction and it was my intention to use the Alexander Technique to develop a keener sense of intuitive balance even when trying new skills.
7. Continuous change: this was my first experience of evidence that my body could change even while I was not having an Alexander Technique lesson and even though I was not consciously practising Alexander Technique between lessons. I had in fact been discouraged from practising Alexander Technique between lessons.
8. Attitude towards auditions: Auditioning is part of any singer's career and it is necessary for the singer to accept their inevitability. I had always found that my nervous anticipation of an audition was far in excess of my nervousness for a performance. The absence of an audience made the performing of an aria almost pointless and the feedback from the people listening was in no way a compensation. I knew I had to think

much more clearly about this attitude if I was going to allow the standard of my auditioning to increase alongside my intended raising of standards in my singing.

LESSON 7

In lesson 7 I tried not to relate every new piece of information about my muscle use to singing technique. We worked some more on standing and sitting and we worked on the table, covering some of the same ground that we covered in Lessons 1-6.

LESSON 8

My teacher made some interesting comments about my rib-cage in this lesson. She said that my upper ribs were tense and tight, not flexible as was desirable. She suggested that this could possibly make my throat tighter than it needed to be and also might cause my arms to stick out rather than hanging loose. She said that my lower back was becoming looser.

We also did some walking during which the tension in my upper ribs was evident. I tried to do the walking without upper rib tension and found that if I allowed my head to go forward and up, my knees did the walking.

We did some more work on the monkey position.

N.B. Awareness of actual muscle use:

1. Observations of what my breathing muscles were actually doing made me more aware of the discrepancy between my knowledge of what I should be doing with my muscles and my practice of what I was actually doing. When I observed myself during singing I found that the tightness or inactivity in my back caused overuse of the stomach wall (or epigastrium) in the front. I realised that this imbalance in activity was one of the causes of tension in the upper ribs. I decided to use only thinking to try and inhibit this particular habit. I thought my weight down into my sitting bones and found that the overuse of the diaphragm in the front eased off.

LESSON 9

My teacher noticed that my legs appeared to be more connected to my body in this lesson. She also discussed the tension that remained in the area of my diaphragm in the front of my body after I had finished singing.

N.B.

1. Emotional release: the day before this particular lesson I had handled an awkward situation in a way that was quite new to me. Three weeks earlier I had bought an expensive portable tape-recorder to use for recording my Alexander lessons and it had been supplied without the necessary microphone. After the three weeks of repeated reminders about obtaining a microphone for me, I had suddenly experienced a rush of anger that went from my head right through my stomach and down and away through my shins and toes. This physical registration of immediate anger was new to me. I did not, however, lose my temper with the shop assistant but firmly insisted on returning the tape recorder and getting my money back. There was no doubt in my mind that this pattern of dealing with an awkward situation was different from past patterns. In the past I would have bottled up the frustration over the faulty equipment and registered some of the tension in my stomach muscles. This new way of dealing with anger left me feeling light and free.

LESSON 10

This lesson was the last of the fortnight of almost daily lessons that we had planned. I was concentrating very hard on what was happening in the middle of my back and finding the new use of muscles in my midriff almost unendurable. While I was lying on the table my teacher worked a little with me on tension in the area of the diaphragm. After this I sat on the edge of the table and she asked me to allow those muscles to be free without her helping me. As soon as

I managed this, I found that there were tears rolling down my cheeks. There was a tremendous sense of relief resulting from this ability to allow tension to release in the diaphragm area.

My teacher noticed that my legs were still much freer than before, that the feet were showing signs of releasing tension, and I was bending more freely from the hip.

The muscle spasm in my right lower back was also showing signs of softening further.

N.B.

1. Stored tension: my teacher discussed with me the physical implications of storing emotional tension. I had just had demonstrated to me that the release of tension in the diaphragm area caused the release of some kind of emotion as well. She said this is a very common area for storing emotional tension. She referred to the jaw as another very common area for stored tension. I made a special note of this because I was aware that the diaphragm and the jaw are two very important areas for freedom and flexibility in singing and felt that I wanted to increase my ability to allow freedom in these areas for the sake of my singing technique as well as for general good muscle use.
2. Awareness of tension: I was becoming familiar with the sensation of new awareness in areas of tension. Muscles that had been tight had not registered their tension in my awareness, but as they released, I felt the discomfort of that tension until their release was sufficient to put into practice improved use.

LESSON 11

During this lesson we discussed the growing theoretical knowledge I was gaining from reading about the Alexander Technique and also reading singing technique books. All this theoretical description of what are essentially practical subjects was beginning to worry me in terms of

my own practice. My Alexander teacher said that the application of what I was doing was going to take a long time and that I had to allow it to happen. There was no point in worrying about it. She said that if we tried to make things happen, we overdo in some areas and underdo in others. The only solution is to leave it alone and have an awareness to let it come right.

I tried to explain what I seemed to be doing with my breathing muscles - I felt that the diaphragm was forcing the sound and that I needed to relax a little: it seemed that the diaphragm ballooned out and ballooned in and was altogether overdoing things; I felt that it needed some help from elsewhere in the body to prevent it from being too strong. My teacher said that the way I was looking at it made it sound very complicated. She suggested that I should just think into my back. We then discussed the in breath in breathing and how a singer feels as though he has to tank himself up with air in order to fill an auditorium with sound. My teacher said that it was not necessary to drag the air in so that it rushed into the lungs. If you let the air in the lungs fill of their own accord. I therefore said that the expiration of breath would then depend on developing all the breathing muscles to a high standard of fitness rather than pressurising their use with maximum amounts of air in the lungs. It seemed to me that I had developed the muscles around the area of the diaphragm to a high degree of strength but had neglected the development of other supporting muscles in the back and the abdomen.

We then did some more singing - a simple Spanish song. I noticed on the tape that the placing of the vowels was still a little bit too far back with the result that the brightness of the song did not come through. The highest note of the song was pushed too far into the front, but there was a good legato and the tone was warm. While I was singing my teacher asked me to release tension down the back of my legs without tilting my bottom. She suggested that I should not push on the muscles so much in general. She said that there was a much more alive feeling in my back, that

the whole back was much better because all the muscles of the back were participating in breathing. I commented that this use of my back was still very difficult for me to achieve on my own. My teacher suggested that I should not get so intense about the details of it but just accept that I was doing some very valuable work.

N.B.

1. Intention: the discussion about breathing was the first of many attempts to clarify my thinking about how I was using my breathing mechanism. I had received a great deal of advice over the years about breathing for singing and it was a refreshing change to discuss breathing as a life support activity and not only as a means of singing. I was beginning to realise that if I did not know what I intended to do with my breathing, I would find it very difficult to increase the efficiency of the breathing mechanism.

2. Inhibition: with the help of the teacher I was beginning to exercise inhibition of old habits of pushing on the breath.

LESSON 12

First I was asked to think my shoulders back from where they were, to think up in front, not to push my back out so quite so much, to think up more than back, and to think down where her hands were touching my pelvis. I commented on my fear of release - the fear that, if I released too much, I would lose my power of being able to do something. I felt that I didn't know what to do in a positive way after I had released. I commented that I was not as conscious of working with my diaphragm as I used to be and yet the diaphragm seemed to be controlling the sound just the same.

I then lay down on the table and my teacher asked me to breathe in deeply and then allow her to rest her hands against my diaphragm while I breathed out. I gave a series of out breaths to a count of six and she commented that my muscles in this area were unusually strong.

I had been complaining about a tickle in my throat for the last two or three months and I described my own singing practising in which I was beginning to be able to breathe with my whole back. In these practices I found that the tickle in my throat was not occurring quite so often.

I also noted that the movement in my legs had improved. The twinge of pain that recurred in my right leg was much less noticeable now. My teacher said that it was much easier to get me in and out of a chair and that the use of my legs was improving. I commented that my awareness of some misuse in my legs was not a particularly comfortable phase and it was nice to get beyond that. I was now aware that the numbness in my heels had gone and that pins and needles in my little fingers which used to occur as I was sleeping had also disappeared. Another awareness I had at this point was that my right arm and my right side and my right leg hip joint were all tenser than my left side.

We then worked on releasing from the head right through to the toes by thinking up and thinking all the way down; by keeping my feet on the ground and lengthening up the back of the neck. I felt a release in my right arm and I managed to include my shoulders in going down the back. She commented that I tended to move my shoulders separately from the rest of me and that it was important to get the shoulders connected up so that my back became a whole. She said that I must think of my neck lengthening up out of my back and once I get that up feeling I would feel freer in the throat. Once I had put these thoughts into action she said that I had a much more "together" look.

She then asked if she could work on my shoulders connecting into my back while I was singing. I walked to the chair and allowed my shoulders to go forward while I was walking; then it was suggested that I should stay in my back and let my neck lengthen up out of the shoulders. My feet should feel the ground and I should feel free in my throat. I sang a simple vocal exercise on two notes while my teacher repeated these instructions over and over again.

When I had stopped my teacher said that she could feel muscles working in an area where she asked me to stay open. My success in staying open did not affect the continuation of the muscular action. I commented that I seemed to be singing with my breath more whereas previously I had been tanking up the breath and getting it trapped under the throat.

My teacher then explained the connection from my right hip into my back and described it as a connection of substance not of emptiness.

N.B.

1. Over-correction: there was evidence in this lesson that my intention to direct my back into my teacher's hand had turned itself into a push. I had taken this type of thinking into my singing many times over the years and it was interesting to know that I was capable of doing this in my general body use as well as in my singing. This is a necessary part of learning the true balance of any activity and the teacher plays a vital role in pointing out to the student those moments of over-correction.
2. Release with direction: at this stage I had succeeded in releasing some of the tension in my breathing mechanism. I was conscious of a fear of further release because I was somewhat confused about the exact directions that I wanted to put into operation. At this stage I needed a singing teacher who had had experience of the Alexander Technique to see me through this kind of fear. It was, however, instructive to know that I was aware that if I released without direction the downward force of gravity would pull me down in the absence of an upward direction.
3. Tanking up with breath: my awareness of this particular habit now became associated with the recurring tickle in my throat. The awareness came after I had succeeded in using my whole back for breath support. It is interesting to note that it was work with the Alexander Technique that made me aware of the disadvantages of

- tanking up with breath rather than the vocal warnings of the previous few months.
4. Discomfort phase: I made a special note of this aspect of awareness for future reference with the case studies. The initial reaction of ease and relaxation of the Alexander Technique can be replaced by a feeling of discomfort or even dissatisfaction with oneself after about ten lessons.
 5. The teacher's role in inhibition: the process of leaving my shoulders out of my singing action was greatly helped by the teacher's constant repetition of weight into your feet, shoulders back into your back, open your throat, feet on the ground, shoulders releasing, up in front, and so on. These are the directions that one eventually is able to give oneself but the process is considerably eased and speeded up with the help of the Alexander teacher.

LESSON 13

We noticed that my shoulders were no longer obviously held at different heights, as was shown in the photographs taken two months earlier. We worked on letting the weight fall into the sitting bones and then thinking a connection up into the shoulders without rising up off the sitting bones to do this. My directions were up in front and down at the back combined with letting go tension in my knees. My teacher asked me if I felt safer doing that because she felt that my attempts were rather tentative. She then asked me to spread my feet on the floor and open my throat. She commented that as soon as I thought of opening my throat my back filled out. I found this amazing.

My teacher said that the process of muscular change was now happening very clearly between lessons as well as during lessons. I had been doing some jogging and had found that the upright position was more efficient. It appeared that I had really got many body connections going now and that it would not help me very much to think about Alexander Technique while I was singing.

I must just let it happen. If I tried too hard I would just interfere. She particularly asked me not to try and struggle with the back area. I commented that I was experiencing tingling in my feet quite a lot now and registering emotions and sensations throughout my body as a matter of course e.g. during a concert or when somebody made me cross. We worked a bit on monkey. I was asked to think towards my back, keep up in front and open the chest. Again I pushed out in my back instead of sending it down from my shoulder area into the lower back. I had to allow length in my neck which I initially did by pushing on the length until I was told to just allow it to happen. I was asked to feel the length up and down my back and to soften into this length.

My teacher then set up my balance for singing and I told her that I felt rather far back on my heels. She said I was actually a little bit forward on my feet and advised me to feel the bones of the feet spreading on the floor. She asked me to release into my knees. She said that the muscle spasm in the middle of my back was due to undue effort in the breathing muscles of the midriff and was not allowing me to lengthen and widen in activity. I sang a lullaby which was a little lacking in breath control. Again I was asked to lengthen my back, open my chest, open my throat and release between my shoulders. She explained to me that I needed to open up so that there was more space for widening. If I allowed myself to fall down in my torso it meant that I had to use more effort to widen and lengthen up. At this point my teacher said that she was exhausted. It is very interesting to note that I felt much lighter after singing in this way than I would normally have felt. I commented that if I could get that degree of relaxation with extra support, then my breathing mechanism would probably become much more efficient. At this stage the vocal control fell about somewhat - at one moment the sound was too edgy at another moment it lacked breath control, at another moment the diaphragm did not co-ordinate its control with the upper note. However I had a growing sensation of progress in the field of releasing habitual tension.

N.B.1. Undue effort causes shortening of the stature:

Alexander's principle of allowing the head to lead forward and up is very difficult to keep in operation, especially when the singer has had a habit of making undue effort. This was my first realization that undue effort was actually the cause of the shortening of my stature and the holding on to residual muscle tension in my back.

2. Connections: I was beginning to be able to operate connections from one part of my body to another.LESSON 14

My teacher asked me to try and listen to her hands. She said I was trying much too hard and she advised me to use the lessons as relaxation and not as work at this stage. She asked me to think into my back and release the weight into my sitting bones. I felt acutely uncomfortable and the discomfort extended right into my knees. She asked me to let my arms hang at my sides, let my knees release and not to do so much work. She said I was inclined to stand too far forward. I commented that when I woke up in the morning I felt completely out of balance and very tired. We discussed the possible reasons for feeling out of balance and it was clear that there was more to it than just reaching new phases in the Alexander Technique. I was contemplating starting lessons with a new singing teacher and experiencing a great amount of anxiety about this.

At this point I lay down on the table and experienced a great deal of trembling in my legs - they seemed to have no sense of direction. It occurred to me that this was just another sign of my fears of insecurity about my singing lessons.

My teacher said that this was a very good lesson. We finished by playing the piano and she was interested to note that I displayed far less tension while playing the

piano than I did while singing.

N.B.

1. Fatigue: it is a well-known fact that intensive Alexander lessons initially cause unusual fatigue. I bore this in mind for the case studies that I was planning.
2. Undue tension in main skill: I found it very instructive that my piano playing showed less tension than my singing. I have since discussed this issue with many Alexander students who have developed one skill more than all the others and it is commonplace that the main skill that has taken many years to develop shows many more tension patterns than other activities. If a performer has decided to earn a living with this skill the causes of such anxieties are obvious and it was my intention to use the Alexander Technique as a way of minimising such tension. It was helpful to know that I did not use such great tension in a skill which I did not consider vital to my ability to earn a living.

LESSON 15

My teacher said that my connections throughout my body were a lot better in this lesson. I was having a little trouble in believing that the chair was actually there for me to sit on. This comment worked round to a conversation about the performer's problem of being hamstrung by his concept of the perfect performance. I was in the process of examining my attitude towards my qualities as a singer and my faults as a singer.

We did some singing in which there were signs of my jaw being unusually tight. While I was singing my teacher asked me to release my weight on to my feet which I did immediately. I noticed that I succeeded in releasing this weight just before a particular note in the song that had always been unresonant - it was a D natural - and the success of releasing weight into my feet seemed to give the D natural a greater amount of resonance. We then worked on the back of the neck. My teacher said there was a certain amount of

blocking there and to free it I had to drop my nose. I explained that the old habit of trying to project sound forward often caused me to drop my eyes to the floor and let the whole face and neck follow the eyes. I had over-corrected in the neck now and was holding it a little too stiff to prevent myself from operating this old habit. My teacher asked me to concentrate then on the eyes rather than trying to change the neck habits. It seemed that there was less tension in my singing than before.

We then did some work on crawling. I was taught how to go down on one knee and then down on my haunches and lean the weight of my body on my hands so that I was on all fours. Then I had to lengthen and widen my back, making sure that the small of my back was not too high or too low, lengthen the back of my neck, raise the collar bone up towards the back, and think width in the throat. There is a lot of skill involved in developing from a standing position on all fours to a rocking position, to crawling on all fours, and eventually crawling on all fours with different patterns between knees and hands. There are many physical skills involved and on this occasion I was learning to lengthen and widen in what was, for an adult, an unfamiliar activity.

N.B.

1. End-gaining: It was interesting how the basic concepts of Alexander's teaching began to emerge in contexts other than the purely physical. Although I had thought about perfectionist attitudes, qualities and faults in relation to my image of myself as a singer many times before, I felt at this stage that my attention to the physical means whereby I was using my body was beginning to clarify my mental concepts. I did not know how my attitudes and images compared with those of other singers, but I felt that I had in the past used fixed concepts of perfection to be unnecessarily self-critical and in this way had on occasion hampered my potential improvement. Examining this attitude with my Alexander teacher was part of the process of changing both the

physical and the mental attitudes towards attaining an "end" from a direct grasp into a reasoned process.

2. Release in action: Operating a release just prior to singing a note that has been unsatisfactory was a new idea for me. I had read a description of the sensation in Alan Titus's article (page 6) but had not been able to operate the idea on my own. However, with my Alexander teacher's help, I felt the benefits in sound of letting the weight release into my feet and striking fuller resonance as if by accident. I learned to develop this ability later on when training as an Alexander teacher and my instant command of such release became an integral part of my singing technique.
3. Simultaneous lengthening and widening: It was my first experience of feeling both these sensations at the same time. At first the student finds the lengthening easier and does not notice or achieve the widening. I always found that the simultaneous operation of both was easiest while crawling.

LESSON 16

Between lessons 15 and 16 I had my first two singing lessons with the vocal coach at the Nico Malan Opera House. I was now in a position to make use of what I had learned in the literature and practical Alexander lessons in my attempts to improve my singing.

My Alexander teacher commented that I was now able to lengthen through my whole being, which was most satisfactory. I enjoyed the sensation because I had noticed that during the week without an Alexander lesson I had found myself slumping into my pelvis again.

She then asked me to widen in my throat. We discussed the subject of throat tension, tickles and crackles and how to imagine more space in this vital area because the subject had

also arisen in my singing lessons. My singing teacher had pointed out that initial success in releasing throat tension caused the muscles to try to hang on to the tension of the old habit and thereby caused an interruption in the release. He said he had heard many great singers crack for this reason. Fear of cracking can cause further tension and impede progress. Again we discussed the problem of wanting immediate perfection being an obstacle to actual improvement.

We then worked on feeling the top of my head lengthening into my teacher's hand and then settling my back into her other hand where I had over-extended a little. I commented that my singing teacher noticed that my upper torso dropped while singing especially on downward intervals. It was nice to know that I was working on a way to overcome this in time. We looked again at what I was actually doing - tightening generally in the front of my body, causing the upper torso to drop and therefore under-using the back. It was clear that this was an old fixed habit that was going to take some length of time to undo.

My teacher also noticed that the muscles in my feet were becoming softer - she said they had been hard and inflexible when I first started. I had also noticed more and more that they were tingling.

We did some more work on "whispered ah".

Both my teachers commented during this week that my response to direction was most satisfactory and that I changed very fast between lessons.

N.B.

1. Breathing: there was now double indication in my singing and in my normal movement that my breathing was too concentrated in the front. My singing teacher said that my diaphragm was pushing for each staccato instead of bouncing freely and my chest was pulling down.

2. Trembling in releasing muscles: In my singing lesson I had been told that there was too much effort in my upper lip and that I should have in mind as natural a mouth as I could. This caused my upper lip to tremble while I sang which I found rather embarrassing. But I linked it with the idea of jerking muscles in the throat and let it tremble - the next singing lesson my lip stayed in a natural position without trembling.
3. Jaw tension: my singing teacher pointed out an unnatural inward opening of the jaw - he said it should fall open without squashing the larynx. He said the effort in the upper lip was causing tension at the collar bone. I then asked my Alexander teacher for a way of using the Technique to solve this problem of throat, mouth and jaw tension. She suggested that I should go down on all fours and imagine my throat wider in the front (she thought that I sang with a "flat throat"); let the neck feel free; let the head nod forward, not the neck; and hum. I did this when I felt I was not overcoming tension problems and found that it did the release for me.

LESSON 17

As soon as my Alexander teacher touched me she said "What have you been doing?" She said my stomach was very tight and even when my legs were stretched out on the table, I only released the tension a little. I explained that I had been taught a very interesting system of thinking about my vowel placing and had been working very hard on this. Obviously, I had over-worked this aspect on my own and lost what breathing balance I had achieved. I had gone back to the old habits with the diaphragm and front tension. My ability to lead movements with my head had improved.

N.B.

1. Over-riding strength of old habits: by now I had read F.M. Alexander's experience with trying to overcome old

- habits (pages 19 & 20), and I was not alarmed at what was an apparent setback.
2. Monitoring muscle tension: the plan of interspersing Alexander and singing lessons close in time was beginning to work - my singing teacher explained that it was a common problem that an interesting new facility learned in a singing lesson often disappeared after three days' practising because the student introduced some other problem. On this occasion I had the Alexander teacher pointing this out to me between singing lessons and I was made aware early on in the process of what I was actually doing.
 3. Mind control: I made a note after this week that I was finding placing the voice with only mental thought much more successful. I had been taught to channel less breath through my nose.

LESSON 18

The main focus of this Alexander lesson was to examine how I was carrying out exercises I had been given for improving the support from my lower abdomen. My singing teacher had commented further on the habit I had of dropping the upper chest on to the diaphragm even when I had started the singing phrase reasonably well "up". He showed me how to maintain minimal energy in the muscles of the lower abdomen right through to the last note of a phrase.

I used the Alexander lesson to observe further what I was actually doing when I practised this. After my previous experience of reverting to old tension habits in my breathing, my Alexander teacher was pleased to notice that I did not stiffen my arms. She said that she would have expected me to arch my back slightly while doing the exercise, but I told her that I was aware of a tendency to do this and was able to inhibit it this time. She did, however, notice that I was locking my knees during the new exercise and she suggested that I practised the lower abdominal support up to the point before I felt I needed to brace my knees - this would prevent developing a further fault that could create general tension.

My Alexander teacher noticed several other developments in this lesson - my legs were freer, I was able to mentally direct release in my legs and neck and my neck was better aligned to my body because I needed fewer books to rest my head on the table.

I also noticed some changes in my functioning - I felt a much better flow in my daily routine even when there were unexpected difficulties to solve. At this point I was doing regular scheduled practices in singing, a part-time secretarial job, attending Alexander and singing lessons and had a sick child. I was dealing with all these changes with a kind of calm that was new to me.

I also made a note that my concentration had a new quality to it. I was on the receiving end of a great deal of advice and instruction at this stage and I notice that my ability to carry out instruction immediately had increased dramatically.

N.B.

1. Inhibition: I was now using my improved knowledge of my functioning to inhibit undue effort in my back and I later succeeded in carrying out my Alexander teacher's warning that I should inhibit the bracing of my legs and remember to keep my arms free.
2. Concentration: the problem of making old mistakes while trying new and unfamiliar techniques had always bothered me in singing lessons. Now that I had read that this is a universal problem in Alexander's book The Use of the Self (see page 22), I was less distracted by the fear surrounding the unfamiliar sensations. Hence my concentration improved as I was freer of the fear of failure.

LESSON 19

It was evident that I had not increased my general body tension although I had had a very stressful week. I was beginning to realise that I was conscious of dealing with

difficulties by facing them and coping, rather than switching off my perceptions and becoming tense instead.

I was regularly allowing my head to go forward and up for sitting down and my legs were staying loose while sitting down. For the first time my back was able to rest flat on the table without the usual arch in the lumbar spine. This showed that the lower back muscles had released.

N.B.

1. Open "ah": in my singing lessons I was working on carrying the vowels with the breath, never letting the breath "starve" the vowel, never letting the sound fall into the throat. This became feasible because my abdominal support was more consistent. I was becoming more acutely aware of the difference between an open "ah" and a covered "ah" or dark "ah" and finding that the only way to maintain the open "ah" was through constant attention to my body use. The lessons were tiring, but I made a note that at no point did my vocal chords sound tired.
2. Lower back ribs: I became aware that the open "ah" demanded the participation of my lower back ribs. (I remembered this later when learning and teaching the "whispered ah"- flexible ribs are essential when trying to sing an open "ah" - and the "whispered ah" is a very helpful preliminary to this experience.)
3. Releasing specific muscles: I was being advised, not for the first time, that I should loosen the sides of my neck and loosen the cheek muscles at the sides of the lower jaw. The difference now was that I had experienced my own direction of muscle release and I had confidence that I could actually achieve small releases in my face and neck.

LESSON 20

At this lesson I showed signs of over-lengthening my neck. My teacher said that I should not try to develop a flat, stringy neck, but think of the throat letting go in the back of the neck. She then paid attention to my shoulders needing to release and letting go in the ribcage. As this took effect I felt an increasing sense of discomfort all the way down my spine. She said this was a good thing because I was getting in touch with the rigid tension in my middle back which would help further release in my neck.

My lesson continued with a visiting teacher from The Constructive Teaching Centre in London who had taken singing lessons herself and was a professional clarinettist. She advised me to think of the back participating more in the breathing and think of freedom of movement in the hips and legs. In our discussion about breathing she said that breathing in itself was not a goal, that I had my whole life to get it "right"! I was then shown how to let my legs dangle on the horse. This had the effect of allowing my back to open while gravity helped my legs to free themselves from my pelvis.

N.B.

1. Inner tension: my singing teacher pointed out at this stage that I was responding to instruction about my breathing action in the muscles on the outside of my body, and not getting in contact with the inner action in the core of my breathing and energy. He described an inner point of energy as the crossing point of two horizontal rods at the level of my pelvis. I realised that this advice went considerably deeper than just the physical action - if the physical production of sound was not penetrating the core of my energy, then the interpretation, emotional content and sincerity of my performing did not stand much chance of developing.
2. Conscious use of lower back: my back was obviously not ready to participate flexibly in my breathing because my singing teacher said I was not using the whole expansion

of my lower ribcage. The uncertainty and discomfort felt in my sitting and standing was only the beginning of releasing habitual tension in the lower back. The back continued to rest flat on the table during Alexander lessons.

LESSON 21

My teacher had the impression that I was taking on some extra tension in my lower back - it felt "as hard as a brick". We worked on releasing the tension on the table and thinking of that area of the back softening. When we returned to the chair, attention was focussed on thinking of the back opening and widening before thinking of the front coming up. I had been pushing up in the front and taking the strain of this in my back, instead of allowing release in my back to allow the up direction in the front. Slowly I managed to think of the whole spine releasing, space between the shoulder blades and the sitting directions became up in front and down at the back with my teacher's help. This enabled me to feel the weight releasing into my sitting bones.

N.B.

1. Learning "doing" and "releasing": it was evident that my own efforts to remedy my descending upper torso involved too much strain, and not enough release. Certainly I was not falling into the old habit of dropping in front, but my remedy was accentuating another area of tension. I was not working as a whole and there was the resulting conflict in my singing and in my normal movements. My actual words in the conversation at this point were - "I don't think I have distinguished in singing the difference between support with letting the breath through and support from pushing the breath through. I still sometimes push - the more anxious I get about the way I am doing it and the effect I am having on the listener, the more I push. I have to make that distinction for the good of my body as well as my voice."

The preoccupation in my singing lesson during the current week was keeping the breath moving, thus enabling the forward

pronunciation of the vowel, the activation of the resonators and the prevention of unnecessary loss of breath in the nose.

LESSON 22

Predictably, we worked on the front/back split in my movements. My teacher explained that the psoas muscle connecting the upper leg to the lower back ribs had become very weak and that I could work as much as I liked with the upper torso, but until this connection strengthened, breathing as a whole would be a continuing problem. She suggested that if I felt contact with this muscle I would get much closer to that internal energy my singing teacher was describing, because the psoas muscle passed right through the pelvic girdle on the way to the ribs. She also noticed that I was using tension in my legs to compensate for lack of flexibility in my lower back.

So we worked on the horse again and I sang while thinking of the connection between the upper legs and lower back. The aim of working on the horse was to cure a tendency I had to lean forward as I was thinking of keeping the vowels forward in my mouth (after my previous singing lesson) and to prevent the tightening of the gluteal muscles which cause the bottom to tilt upwards and the muscles of the lower back to tighten.

N.B.

1. Tension-free legs: I had never been taught to tighten the buttocks as part of my singing technique, but I was aware that some singing teachers advocate this. It feels very "unsafe" to let go tension in the legs and buttocks while singing, but it makes a great deal of difference to moving about the stage freely and to flexibility in the breathing system.

LESSON 23

My back appeared to be widening and lengthening most successfully. We worked on some pianissimo exercises and my teacher noticed that I pinched my shoulder blades towards each other for piano

and high notes. She thought my middle range was free and connected to my back but, as I went into the higher register my body rose up with the pitch and lost its foundation in the sitting bones. I tried jumping from a low note to a high note and she said that my head "disconnected" from my body for the jump. It seemed to me that this was a misconception of mine from long before that arose when I was trying to get more head resonance. We worked further on weight going down the back and length up the front while singing.

I then did more work on the "monkey" position - this time I was made aware of the value of lengthening and widening in all the sections of the body in rotation so that the body never became fixed.

I continued singing sitting in the chair and this time managed to keep my weight in the sitting bones while reaching the head voice range. The C sharp leading to the head tones had a totally new quality of resonance.

We discussed at this stage the tension resulting in tanking up with too much breath for the exercise or phrase. My teacher pointed out that, if this resulted in stiffness in the neck, it also resulted in cutting off a large percentage of the sensory perceptions in the base of the skull. We therefore lose the precise connections with the body mechanism, adapt to a relatively gross posture and end up only responding when this misuse starts causing us pain.

I related a recent experience in an audition when I deliberately used my ability to connect my feet to the ground and lengthen up to my head. The result was a much less nerve-wracking audition experience. I also learnt an Italian aria in two days for the same conductor and felt that I learned the words much quicker than usual.

N.B.

1. Expansion procedures: after this lesson I practised singing for over an hour and experienced a tightening of the sound

- on the top B flat at the end of an aria; so I directed width into my shoulders before striking the note and the thinness of sound and sense of effort disappeared.
2. "Monkey": this concept of keeping the body releasing in rotation was my first experience of total release. I was to develop this into the idea of constantly keeping breath support while singing in the "monkey" position.
 3. Supporting down: this is a phrase used by many singing teachers and it seemed to me that I was actually learning to use the idea accurately by letting the weight drop into my sitting bones throughout the full range of my voice.
 4. Breathing in: the discussion about tanking up with breath reminded me of Lilli Lehmann's description of reorganising her breath control after 25 years (page 35). Now I was having explained to me some of the detrimental possibilities of over-doing the in breath.
 5. Nervous tension: my audition experience made me feel as though I was learning to control my attitude to auditions. (See page 53.)

LESSON 24

An interesting development at this lesson was the evidence of releasing tension in my legs. While I was lying on the table on my back, my teacher straightened out my right leg in the usual way, returned it to the flexed position and then straightened out my left leg. While she was working on my left leg, the right leg started to tilt over to the side and I seemed to have no control over the movement. She said I was watching it happen as though the leg did not belong to me.

N.B.

1. Tension-free legs: this was a clear case of release of tension occurring without the student "doing" anything. It happens to many students and some of them are a little alarmed when they cannot prevent the legs from falling to the side. In time the student learns how to direct the legs towards the ceiling so that they do not fall.

LESSON 25

I worked further on opening the back and was advised to think of the the corresponding area in the front. My teacher said that I had a tendency to do too much, rather than let things happen.

We discussed the various opinions I had been given about the type of voice I had and which roles I should consider studying. My teacher commented that, if my singing was the same as my Alexander work, I probably needed to let the voice flow more and then decide what sounds were resulting from the letting go. She said I was following instructions which was fine up to a certain point, but then I should let it flow if I wanted to experience the real thing. If I allowed the sound out the right decisions would emerge about the roles to play.

N.B.

1. My singing lesson continued to work with mouth position, gentle attacks on the phrase, vowels and thinking a connection with moving the breath from the lower abdomen right past the back of the tongue.

LESSON 26

This Alexander lesson was directly after the last singing lesson and I was still carrying out the ideas worked on in the singing lesson. There was a greater sense of ease in the sound; my back was freer; the pianissimo singing was working; the front/back split in my action was far less noticeable.

LESSON 27

At this lesson I did some singing on the horse again. I made a note that I was distinguishing between an open "ah" and a darker covered "ah" quite regularly now. I did five note exercises up to top C and then repeated the exercises while my teacher helped me release tension in my leg during the

singing. She must have noticed tension in my right leg at E natural on the way up the scale because she held my leg loosely when the exercise approached the E natural. I was conscious of wanting to pull on the right leg, and when I found I was unable to do so, my tongue shot forward and the note flew out of my head like a bomb! It took us both by surprise.

She also noticed that for about half the singing time I was holding my ribs in a fixed position. I explained that I had been taught to do this many years ago and that I tended to return to the habit when I was experiencing something new in singing. I was finding that holding them out was preventing the successful application of lower abdominal support. My teacher suggested that the ribs have to inflate and then deflate if the breath is to keep moving.

I noted at this lesson that I had the feeling that the old habits were not going to return as easily any more. My shoulders also felt less tense and seemed wider.

N.B.

1. In my singing lesson we continued to work on moving the breath over the tongue without pushing or blowing. I realised that when I was stopping the breath and moving away from my support, I was actually fixing the ribs and starving the sound for a split second.
2. I found it very puzzling that my tongue should finally move off the back of my mouth and let the sound out after my leg had been released. I have since found that the top notes are much freer in all my students if they can persuade themselves to keep loose in the legs while approaching high notes. Further experience convinced me that tight leg meant tight abdomen, which meant tight ribs, which meant stopping airflow, which meant tighter throat muscles, which meant less head resonance, which meant more effort for projection. This assistance with moving the tongue off the back of the mouth was one of the most exciting examples of how the Alexander lessons

were providing me with more ways of carrying out my intentions while singing.

LESSON 28-

We were still covering the standing, sitting and lying on the table in all the Alexander lessons at this stage. I had reached the stage where the specific experiences during the lessons were filling in a general picture of the role Alexander Technique could play for singers who were prepared to examine their technique thoroughly. It is undoubtedly very difficult to teach the subtle details of breathing and this is made much more difficult if the singer has ingrained habits that impede his ability to carry out these subtleties. There are those singers who have enough mind/body connection to carry out detailed advice, but other singers, with perfectly good vocal instruments, have lost a certain degree of mind/body connection that makes detailed instructions more difficult to carry out. Alexander Technique can help to bridge this gap in the singer's mind/body coordination, giving him a tool that even the so-called "natural" singer does not have under pressure. He develops a conscious awareness enabling him to think the action through, rather than "getting it" or "not getting it".

We worked on letting go tension in the lower abdomen and saw how it enabled widening and releasing in the sacral area of the lower back. Sensitivity in this connection was becoming important in my thinking for breath support and I was keen to explore the results of releasing tension before expecting some support from the same set of muscles.

N.B.

1. Thinking as a whole: this discussion about the general application of Alexander Technique to singing was important at this stage, because I was already falling into the trap of becoming too involved in carrying out specific instructions (See Lesson 25, page 79). I made a note of this for future practising and teaching and determined to remember to

return to the whole in each lesson.

2. Releasing before acting: my singing teacher was asking for more activity from my lower abdomen; my Alexander teacher said I would be more successful if I released the muscle spasm in my lower back; I fell into tension habits when I tried to sort this out on my own; here, perhaps, was the solution to developing flexible action in a muscle group that was already tense with spasm - RELEASE THE CONNECTION BEFORE YOU TRY TO USE THE MUSCLES.

LESSON 29

We worked on the horse, table and chair. My teacher watched me singing again and said I was still rising in my body at the end of a phrase. The other habit she noticed was gradually poking my head forward as I went along. She suggested that I think of a connection between my forehead and my lumbar spine so that I did not overdo the stretching up of my head.

We discussed how best to observe such habits when practising alone and she suggested profile mirrors.

N.B.

1. Cross-connections: using the connection between my forehead (the forward and up of Alexander's description) and my lumbar spine was a very successful way of preventing over-stretch and keeping the muscles of the lumbar spine in activity. I developed this idea of cross-connections for several of my pupils who had over-stretch or over-collapse habits.
2. Mirrors: three mirrors set in the corner of the room enable the singer to be his own observer. The singer has all his senses available to monitor his sound and action, but often sees only his front action in a mirror. I later developed a system of placing a student with mirrors on both sides, and at the back so that I could see his action all round while listening to his sound. I used this for observing my own back action as well.

LESSON 30

My teacher noticed, not for the first time, that my back was still losing its connections from the way I was working on my breathing. It did not take long to connect it up again, and I was relieved that this was so. I was trying rather too hard to maintain erect posture and this was a strain while the muscles of the lumbar spine were still weakened with spasm. The visible lump in the right lumbar area had flattened out somewhat but it was necessary to reduce it more because it was inevitably interfering with the flexibility of the ribs. I achieved a better lengthening between the sitting bones and the neck. My breathing habits were still shortening this area and I still needed my Alexander teacher to help me experience the lengthening required.

The release in my upper thigh and gluteal muscles was very good.

We also noticed that my response to the teacher's hand directions was becoming more and more immediate. The same was happening in my singing lessons. My singing teacher also used gentle touch to indicate where he wanted release or placing of sound, like the neck or the upper chest. My response was immediate. Then he would stand at the other side of the room and merely say the words "neck" or "chest" and the response would be immediate.

We worked on crawling again and this helped with length between top of head and base of spine.

N.B.

1. Sense of process: it was becoming clear to me that the process of undoing interfering habits started with awareness, teacher-directed releases, constant repetition reinforced with moments of success and realisation and only then could the process culminate in personal direction of release and action.
2. Spontaneity: the question is often asked if all this conscious direction does not destroy spontaneous reactions. The experience in my singing lessons indicated that the contrary was possible - my response to suggestion was immediate and spontaneous.

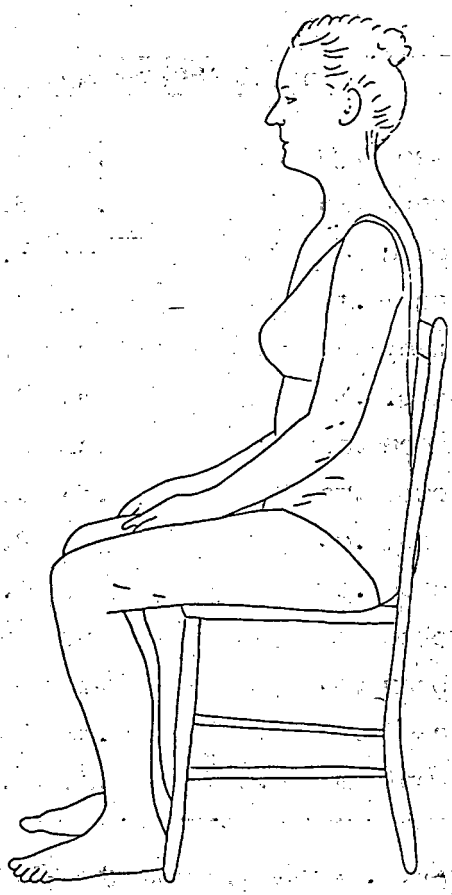
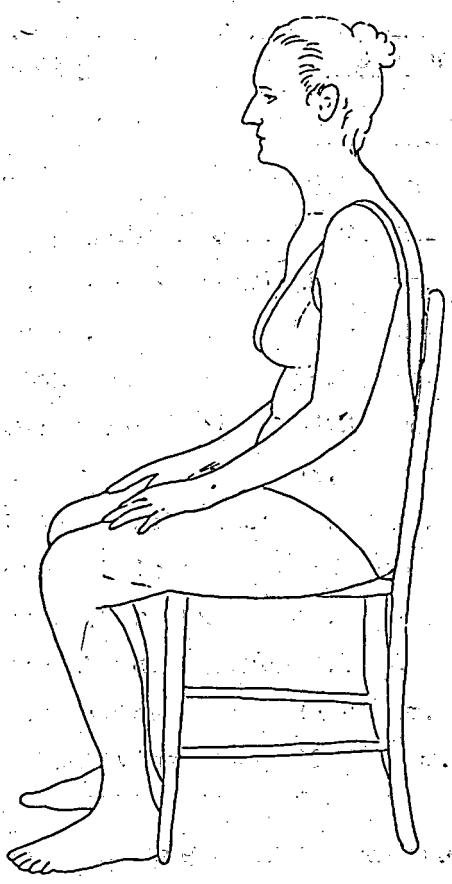
Certainly one passes through a self-conscious and fixed stage when the new awareness has not been translated into release; but when this passes, the body is freer to respond to stimulus.

These thirty lessons formed the basis for my concepts for applying Alexander Technique to singing. Later I took photos of my postural condition (Figures 3 - 9); I went on a three week recital tour; and I joined the Alexander Technique training course in Cape Town.

All the observations and conclusions noted after my Alexander lessons were the beginnings of vital concepts that helped me with my performing and teaching of singing. I was privileged to have lessons with and observe the teaching of three experienced Alexander and Voice teachers in London and New York. They helped me develop these concepts into practical applications and by the end of the next two years I had a thorough understanding of when and where I was using tension while singing and how to sing without undue tension when circumstances permitted.

Figure 3.

Figure 4.



5th December 1983.

15th July 1984.

Figure 5.

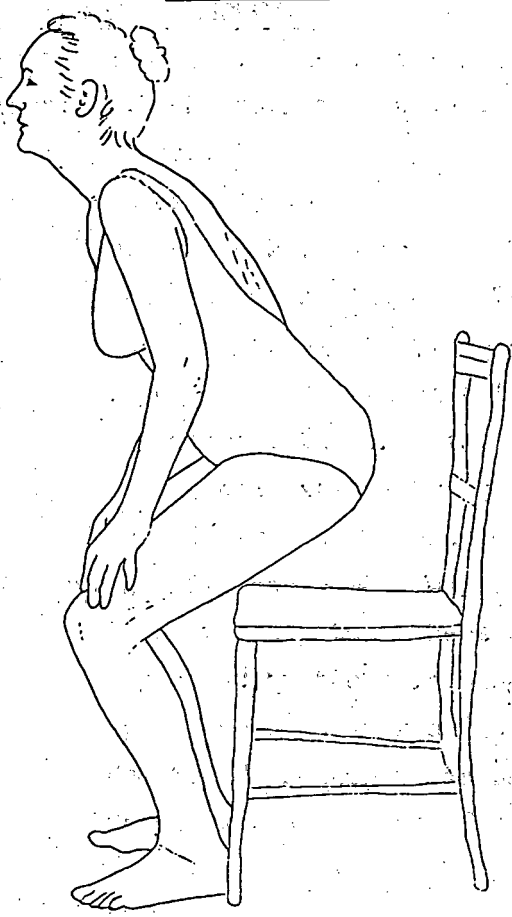


Figure 6.

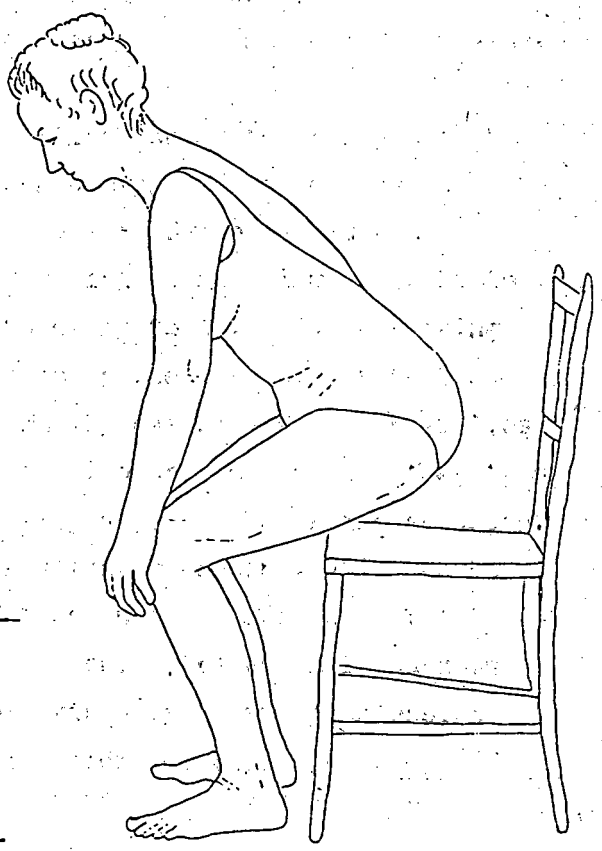


Table 2.

Measurement	9th December 1983	11th August 1984	Change
Weight	60.2 kg.	58.9 kg.	1.3 kg. less
Height	168.0 cm.	168.5 cm.	0.5 cm. more
Neck circumference	31.0 cm.	31.5 cm.	0.5 cm. more
Shoulder width (back)	38.0 cm.	37.0 cm.	1.0 cm. less
Ribs exhaled	80.0 cm.	74.0 cm.	6.0 cm. less
Ribs inhaled	88.0 cm.	83.0 cm.	5.0 cm. less
(actual expansion)	8.0 cm.	9.0 cm.	1.0 cm. more
Chest normal	98.0 cm.	99.0 cm.	1.0 cm. more
Waist above umbilicus	78.5 cm.	75.0 cm.	3.5 cm. less
Arm stretch left	211.5 cm.	212.5 cm.	1.0 cm. more
Arm stretch right	213.0 cm.	214.5 cm.	1.5 cm. more
(left/right difference)	1.5 cm.	2.0 cm.	0.5 cm. more
Left leg lying down	86.0 cm.	84.0 cm.	2.0 cm. less
Right leg lying down	86.00 cm.	84.0 cm.	2.0 cm. less

These measurements were taken 37 weeks apart after 47 Alexander Technique lessons. They were taken by my family doctor who checked them carefully after each measurement, especially those that had changed significantly. There was some change in each measurement but some are more significant than others in terms of my current muscle use and the changes I wished to make in my singing.

MEASUREMENT ANALYSIS

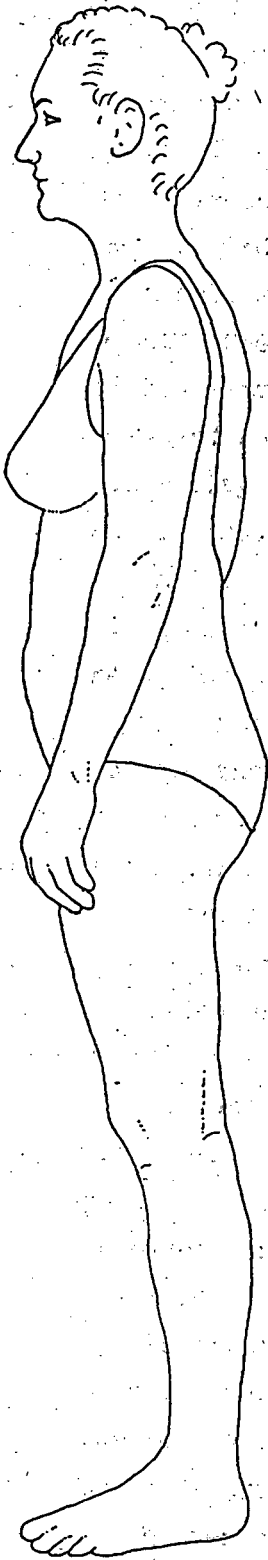
Weight: 1.3 kgs is not a significant weight loss over 37 weeks.

Height: 0.5 cm. is not remarkable except that it is an increase and not a loss.

Neck: an examination of the visual outlines seems to indicate that my neck has lengthened. The measurement indicates that the neck has also widened. This is a satisfactory result for the Alexander Technique re-education because I was taught to lengthen and widen in all parts of my torso. From a singing technique point of view, it opens up the possibility that my whole neck externally and internally has widened which implies that I might have conscious control over the opening of my throat.

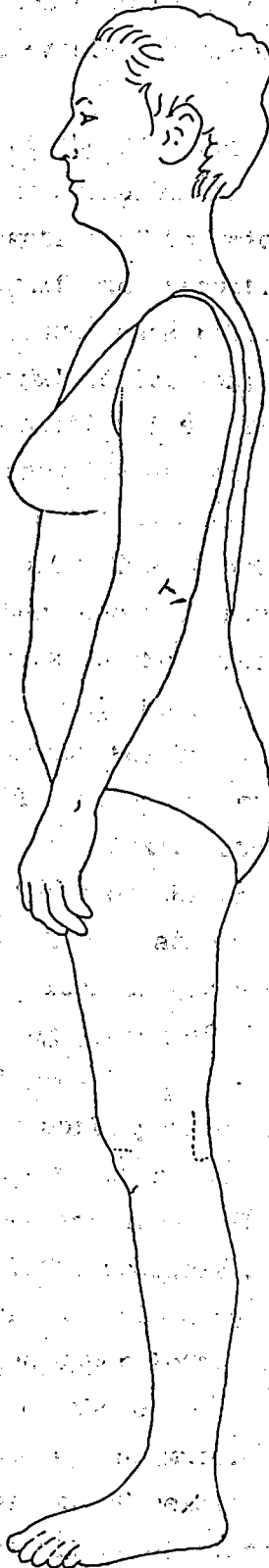
Shoulder: as this measurement was taken only at the back of the shoulder, it shows only that there was a slight narrowing. This can be explained by the releasing of tension in the front of the upper chest which was causing the shoulders to curl round in front. This change can be seen visually in the progression from figures 7, 8 and 9. It has profound implications for

Figure 7.



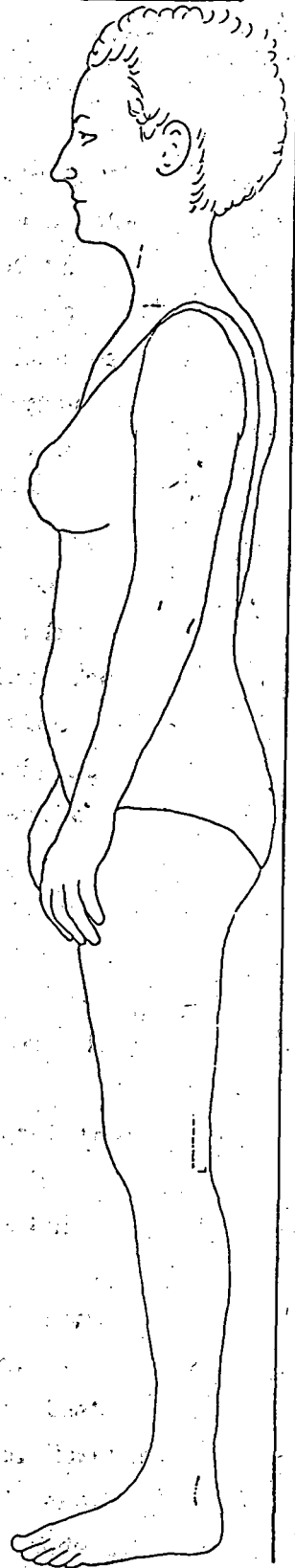
5th December 1983

Figure 8.



15th July 1984

Figure 9.



8th March 1985

my intention to overcome the dropping of the sternum and to learn conscious control of the upper chest. This is evidence of the beginnings of changing the kyphosis or round-shouldered tendency of the upper torso in normal standing. If I could apply this while singing, it pointed the way to solving the problem of dropping the sternum while breathing out.

Ribs: there is no doubt about the profound change in the girth of my ribcage. Both the measurements and the visual outlines indicate an elongation of the midriff out of the pelvic girdle and a significant reduction of the lump of muscle spasm in the lower back ribcage. This implies greater freedom for normal activities; but for singing it has very exciting possibilities. The absence of a downward pull in the torso leaves space for greater elasticity of the intercostal muscles which is essential for all good breath support. The reduction of muscle spasm implies far greater potential for conscious participation of the lower back in the support mechanism. The reduction of any spasm of this obvious nature provides relief of tension throughout the body. It is important to note that, although I lost actual girth, I actually gained one cm. in expansion flexibility.

Chest: the opening out of the front of the chest accounts for this small increase in chest measurement.

Waist: 3.5 cm. is a significant loss of girth round the waist. It indicates that the lengthening of the midriff extends deep into the abdominal area.

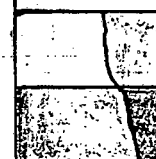
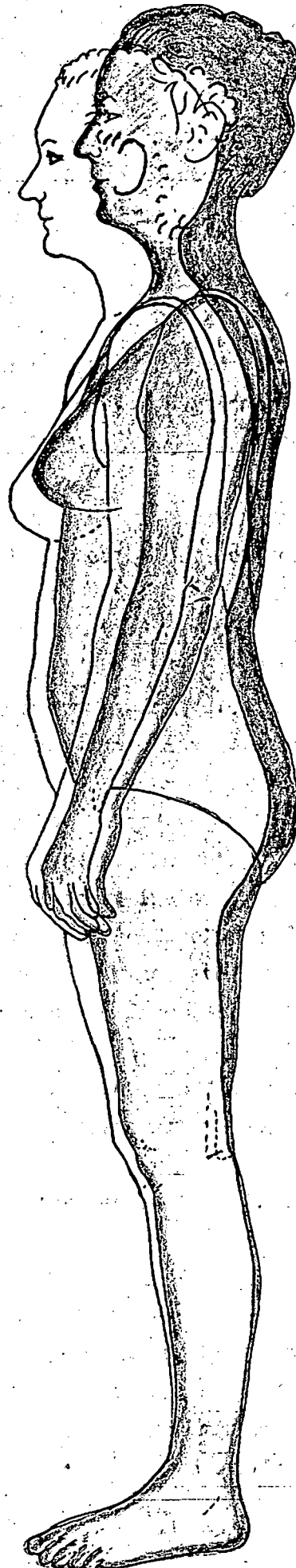
Arms: an increase in the arms' ability to stretch indicates that there has been some lengthening in the arms and in the muscles in the shoulder-blade area. The right arm has released more than the left, probably due to the loss of spasm in the right lower back rib area. The twist from the scoliosis affects the upper left shoulder, and, although this is improved there is still evidence that the left arm is affected by the muscle spasm here. However, there is evidence of one cm. of release in the left arm, which opened up the possibility of overcoming the tendency to raise my left shoulder while approaching difficult passages in singing.

Legs: this measurement taken from the superior iliac crest on the pelvis to the medial malleolus (inner ankle) is an indication of the normal angle of the pelvis to the leg. An alteration of 2 cm. indicates that the lifting of the extra weight of the torso from the pelvic girdle has enabled it to become freer of the tension in the lower back and allowed the slight forward thrust of the pelvis to release, thereby causing a downward drop of the front of the pelvis. All this helps create freedom in the back of the legs and front of the ankles. Singers often tighten their legs with effort and it is encouraging to realise that this residual tension in the legs can be released. Freedom of movement in the legs is very helpful with stage performances and the development of conscious control of tension in the legs helps to keep free in the whole body during difficult passages of singing.

Change of Balance

Figure 10 is made up of the outline from the photograph taken on 5th December 1983 superimposed on the outline of 15th July 1984. The paler figure shows the way I used to retain my balance with the weight resting too heavily on the front of the feet and the head held too far forward on the body. The darker figure is the more vertical stance which results from learning to distribute weight more evenly across the feet between the heels and the outside of the balls of the feet; this enables release in the knees; then the backs of the thighs can release and the crease in the back leg/hip joint becomes less pronounced; tension releases in the lower back; more space is made for the organs of the abdomen and the abdomen wall becomes flatter; the midriff lengthens; the chest expands and lengthens; the throat lifts off the clavicle; the shoulders widen; the neck lengthens and the protruberance at the seventh cervical vertebra smoothes out; the cervical vertebrae lengthen into the skull; the slight double chin disappears; the jaw loosens; the height increases. The outline in Figure 9 shows that this above process continued between 15th July 1984 and 8th March 1985.

Figure 10



Outline of photo
taken 5th Dec. 1983

Outline of photo
taken 15th July 1984

Physical Profile

The details of these physical changes can be compared with the physical profile on pages 32 and 34.

Head: in all the outlines it is evident that the head is held further back in relation to the torso and nearer the centre of balance.

Neck: figs. 3 - 6 all show that the shortened neck muscles have lengthened and that the slight tendency to develop a "dowager's hump" has disappeared.

Jaw: the slight double chin has disappeared and the jaw has lost most of its habitual tension.

Chest: the obvious shortening of the vertical muscles in front of the torso has released. Upper torso is not habitually pulled down while sitting and standing. Fig. 9 shows that this process continued.

Shoulders: the thoracic curve has lengthened; the curling forward of the upper arm in front has become less noticeable between figs. 3 and 4; the upper chest has opened out between figs 7, 8, and 9. The shoulders were also level at this stage.

Spine: the lengthening of the lumbar spine and the resultant reduction of the muscles spasm can be seen clearly in the progression from figs. 7 - 9, and there is hardly any evidence of shortened muscles in the middle back.

Torso: the whole midriff is longer and seems thinner. Since muscles are constructed in spirals, the extra length also implies an undoing of the twist (scoliosis) in the torso.

Arms: fig. 6 shows arms hanging more freely from shoulder.

Pelvis: a comparison of figs 7 - 9 indicates that the pelvis is tilted slightly further down in front, thus allowing a better lumbar curve.

Knees: less braced backwards in figs 8 and 9 than in fig. 7. This means less shortening of the muscles in the upper thigh under the gluteal muscles.

Weight: no longer tilted forward as in fig. 7, but centred above the ankles, as in figs 8 and 9.

Breathing Profile

The details of the breathing changes can be compared with the profile on page 35. During the two years of the project, the flexibility of my rib muscles returned. In the first 6 months the actual expansion increased by 1 cm. (Table 2, page 86) and by the end of two years

the increase was 3 cm.

Chest: I no longer allowed th chest to drop while singing and was able to maintain an open chest while singing.

Diaphragm: all residual tension in the epigastrium disappeared and the diaphragm remained flexible while singing, instead of tightly under control.

Lower Back: after a period of allowing the lumbar spine to curve inwards while singing, at the end of two years I was able to maintain the pelvis balanced on top of the legs, while using the inward flexing of the lower ribs right through to the last quantity of air in the lungs..

Lower Abdomen: became much more active in the balance of the support. After a period of developing both outward and inward flexibility of the muscles, by the end of two years, the abdomen was able to coordinate energy with the lower back ribs to support the phrasing.

Focus: while practising or rehearsing, I learned to focus on the muscles that seemed lethargic at the start. I very seldom found it necessary to focus attention on the epigastrium. In performance, with the added energy from the adrenalin, I regularly experienced the total cooperation of my breath support system with my musical intentions, without having to focus on breathing at all.

Intake: still occasionally audible, but it became possible to take in breath without sound or effort.

Sound Profile

The shedding of the "covered ah" sound was vital to freeing the natural sound of my voice and I needed a great deal of encouragement from my singing teacher to achieve this. I found that the so-called manufactured "ah" was so prevalent that the ear becomes dulled to its presence. All the Alexander/Voice teachers insisted on the ability to sing an open "ah". I also had the remarkable experience of observing a singing lesson of a mezzo soprano who was training to teach Alexander Technique and had been trying to open her "ah" vowel for years. On this occasion, she actually sang an open "ah" and the relief was so great, she burst into tears! It is a very necessary sound both technically and psychologically.

I retained the lyric repertoire that I had been working on before the project started and I added much more ease to the coloratura arias

The Russian Nightingale (Alabieff), The Doll's Song from Tales of Hoffmann and Le Filles de Cadix (Delibes).

Middle register: retained its warmth of tone, developed further flexibility (for trills and ornaments) and seldom darkened in tone.

Upper register: lapses to habitual covered tone on E natural were rare. E natural to A natural a very easy range for my voice. B flat and B natural still powerful and the pianissimo was developing. Top C much more consistent. On occasions my voice was open enough to reach G sharp in alt, but I still used only E flat in performance.

Chest register: I overcame difficulties with low A in performances and I used the mixed register tone down to low G.

Vowels: in the two years I finally learned to control vowel shape with my mind only and not with effortful muscle shapes in the mouth and face.

Consonants: reverberated more in the body resonance, but still needed attention.

Legato: I learned how to avoid stopping the breath by trusting the flexibility of the ribs.

Balance Control: I learned how to channel breath through the mouth while still thinking sound into various resonant placings.

General Observations

I could rehearse for over two hours without becoming tired. If I worked too long, my legs became tired, but never my voice.

I suffered muscle spasms in my left shoulder blade area and lumbar spine area during the two years. Previously, I would have "frozen" activity in the painful area, but on both occasions I was encouraged to direct release and allow activity in the spasm. The shoulder tension still reflects my general tension patterns; but my lumbar spine muscles finally learned to participate in all breathing activities and developed the strength to maintain the correct lumbar curve from getting up in the morning till late at night. There was no further aching in my right back hip or the right leg/hip joint. My heels were never numb.

General comments from observers were very encouraging. Many thought I had lost weight; some said my performances were very relaxed; other singers said that my breathing seemed effortless; someone even asked how my thumbs remained so relaxed; a producer said he had never seen a singer with such free arms. I certainly used directions in performances and auditions that prevented undue tension in my breathing system and thus removed some of the worst symptoms of nervousness. The power of these directions was extremely useful when I was singing the "Pie Jesu" from Faure's Requiem with the Cape Town Symphony Orchestra - I directed myself from a state of extremely self-conscious nervousness to the calm of self-awareness by allowing weight into my feet and energy to flow from my toes to the base of my skull as I stood up to sing.

Assessment of Results

I took these results and photographs to another general practitioner, an ergonomist, a kinesiologist and a physiotherapist to ask advice about more accurate ways of measuring body changes over a long period of time before I embarked on the five case studies. It was then that I realised that even a change of 6 cm. in the rib cage was very difficult to perceive from a photograph and only trained Alexander Technique teachers were able to tell where a muscle had released and realise the significance of such changes in the general body tension. This was why I reduced the photographs to simple outlines. It was the physiotherapist who helped me to find the relevant points of the skeleton to use for measuring change and how to measure as accurately as possible. Thus we improved on the basic measurements of the pilot project. We included all the measurements that had been used for myself and added more detailed ones for the spine and shoulders - occipital protruberance/seventh cervical (the pointed bump at the back of the skull to lowest vertebra of the neck); sitting height; shoulder width back and front; interscapula distance (between the points of the shoulder blades); chest inhaled, exhaled and normal. We used a stiff metal tape measure for the spinal measurements, height and legs and a cloth tape measure for the other distances. We used the same weighing scale before and after the course of lessons. Each student lay down on the floor for five minutes before being measured and the time of day was similar. The measurements were taken before and after thirty lessons in the case of each student. The demands of their courses and their work meant that it took some of them longer to complete thirty lessons, but they all took between $4\frac{1}{2}$ and 7 months to finish the course.

It must be clear that this project does not set out to prove that the Alexander Technique succeeds in changing body use - that has been written about in great detail by Frank Pierce Jones and Dr Wilfred Barlow; many individual accounts have been written to describe the success of the Technique; television documentaries have been produced to explain and demonstrate how the Technique changes body use. The measurements are therefore merely an indication that habitual tensions in singers' daily and performing body use can be released and that conscious control can be put to increasingly successful use in the acquisition of singing technique. Small changes of less than 2 cm. over a period of 4-7 months can be caused by many other factors like time of day, weight change, even mood. But changes greater than that can be regarded as evidence that the muscle use has altered.

V CASE STUDIES

Case A

Case A was a mezzo-soprano who had been taking singing lessons combined with an academic career in sociology for about six years. She had had lessons with three different teachers in recent years and, although she was improving in some respects, she was aware of recurring vocal faults that she was not overcoming. Her career made regular practising difficult and the long drive from Cape Town to the University made her singing lessons more difficult to maintain while she was busy. So she started vocal lessons with me and agreed to become a case study on the Alexander Technique project.

Physical Profile (Refer to Figures 11 and 13 for physical outlines.)

Head: habitually held too far forward in relation to the torso.

Neck: stretched forward with tension in muscles at the back of the neck. Visible tension in front of neck.

Jaw: not particularly tense - opened wide while singing.

Chest: collapsed in front, sternum pulled down.

Shoulders: shoulder blades poking out ("angel wings"); also pulled towards each other, narrowing the back.

Spine: exaggerated lumbar curve i.e. lordosis.

Torso: thrust slightly forward in front because of lordotic curve.

Pelvis: dropped downwards at the back.

Knees: braced back.

Feet: Rotate inwards, left foot worse, arches collapsed.

Breathing Profile:

Intake and expiration largely active only in upper half of her body. Sternum dropped while singing. Preceded singing with a slight spasmodic jerking of the front of the abdomen and the epigastrium. Shoulders tended to rise up and over. Abdomen weak in muscle tone and inactive while singing. Back narrowed while singing. Support/sound connection inconsistent resulting in a flutter in the voice. Legs stiffened while singing. Felt she had no control over her breathing muscles. Where this lack of control was most keenly felt in the upper register, she retracted the corners of her mouth excessively.

Sound Profile

Although she was training as a mezzo-soprano, she tended to learn repertoire in the contralto range. The voice was of potentially large dimensions but had a flutter throughout the range due to inadequate breath control. She had trouble projecting sound because the placing was too far back in the throat. Focusing sound was very difficult for her. She found it very hard to understand head resonance. Her best range was from B flat below middle C to B flat above middle C. There was a strained sound from B flat above middle C and, after practising up to E natural she complained of a sore throat. The voice would go as high as G and A, but she was most uncomfortable there.

Incidentally, Case A is a very good sight-reader, pianist and organist and has a strong drive to express music with her voice. Hence her determination to continue singing lessons although she has a demanding career.

This strong drive I have learned to obey in my own singing and I have also learned to recognise it in potential students as an essential ingredient to progress. When a student seems to have insuperable vocal difficulties, it is tempting to let him and me both off the hook by offering advice to give up. But when I have persisted, I have never regretted it. I found that I was not alone in this attitude when I found a fascinating article by Esther Salaman in Opera magazine in which she described her long and circuituous route through eight singing teachers, vocal instability and agonising nervousness towards an awareness that enabled her to focus sound. She states very clearly:

"My persistence was an impelling drive, which I now understand and greatly respect as I meet it in many youngsters needing to express emotion through the voice wherever it may lead." ¹.

General Observations

Case A suffered from fatigue and pain in the lower back from time to time. She had a spastic colon, but was otherwise healthy and fit.

1.E. Salaman, "Cerca la qualita e la quantita verra", OPERA, July 1983, p. 729.

We started singing lessons in July 1984 and she began her Alexander Technique lessons in March 1985; so I was able to teach her with and without the help of Alexander Technique. Case A is a most rewarding student and ideal for detailed study because she is familiar with the demands of research; she is aware of the value of creative feedback; she is prepared to examine her shortcomings as well as her progress; she had an awareness of her muscle direction that was sufficient for her to tell whether she was succeeding in carrying out new directions or not; her desire to understand her voice was much stronger than her desire to impress others with her singing ability.

We started with her breathing -

Lower abdomen: all her previous attempts to bring her lower abdominal muscles into her breathing action had only achieved a slight spasm which was not helping her support at all. She had very little control over the muscles between the sitting bones so we started work on flexing the "pelvic muscles". After a week of doing this she complained of lower back pain, so we assumed that she was tightening her back to achieve the flexibility in the front. We then tried the lower abdomen/lower back/ front rib muscles connection while lying on her back and she found this easier. The standing habits of tensing the lower back muscles were too strong for her to develop her strength in the lower abdomen at this stage. At this point we were able to discuss the tension in the lower back as an INTERFERENCE which was preventing the progress of muscle tone in the abdomen.

Mouth position: the pulling back of the corners of the mouth was the result of poor breath control and was taught to her as a way of overcoming the tendency to darken her voice. What was actually happening was that the mouth was retracting so vigorously that the back of the neck was tightening and preventing any access to head resonance. The lack of breath control was also tightening her throat and causing the soreness after practice sessions above B flat. What was disturbing was that this habit was very strong and irresistible. Many singers allow their lips to retract for top notes and try not to allow it to happen wherever possible. But their habit is not as strong as Case A's.

Here was a perfect example of the irresistability of the LEARNED HABIT - exactly bearing out Alexander's experience with "taking hold of the floor with his feet". Singers who have battled for many years with poor breath control often develop exaggerated mouth positions, stiff tongues and tight jaws as replacements for control in the real breathing areas of the body.

So, with Case A, we repeatedly linked up each new direction of breath control with further loosening up of the lips, so that she made this connection herself - more true breath control = less mouth tension. There was some improvement.

Sitting bone muscles: we made a start on developing some control in these muscles by using a two-note "ah" exercise with weight on the stool. As she had done no Alexander Technique, it was difficult for her to appreciate the value of releasing weight into the sitting bones and she had very little awareness of detailed muscle control. But we persevered and combined it with trying to open the throat into a brighter "ah" vowel. She understood the feeling of naturally moving air through the throat but did not manage to move that air easily herself with the muscles of the abdomen. Her "ah" vowel was so far back in her throat that she had to begin to readjust her inner hearing completely in her work towards a brighter, more focussed "ah". It all sounded breathy to her.

Head/neck/torso alignment: Case A's forward head position was the major interference in her technique. Every attempt at "placing" the voice ended up with pushing the head slightly MORE forward on the torso and tightening the passage through the pharynx even further than it was already. It was no wonder that she had not been able to understand how to maintain head resonance. The only way that she could achieve it at this stage was when I physically held her head. Without this manual guidance she had no control over her head position from B flat upwards.

These then were the main features of our singing lessons. After a few months she sang to the project tutor who pronounced a great improvement.

Case A then started on her Alexander Technique lessons. She made notes on the lessons whenever she could and summarised them as follows.

1st March

After her first lesson she learned to relax more during the lessons. Her body began to sense the improved use especially the head and neck. She realised exactly where the tension points were in the shoulder blades and the back of the neck. Moving a muscle was not a matter of a tense jerk, but a released lengthening of the muscle. There was a remarkable difference in the feel of the arm that has been lengthened and the one that still has to be worked on. She enjoyed working for a sense of length in the back, from the seat to the top of the head and from the lower front to the front of the neck.

N.B.

In her singing lesson at this point we worked on allowing the lower abdominal muscles to release outwards; smiling at the back of the throat; lengthening in the back to sing; opening the throat at the back of the neck. We were working in this way because she needed to release the shortening of the muscles at the back of her neck (See figures 11 - 14).

6th March

Her abdominal muscles seemed to be able to extend. She felt relaxed after the lesson. Her back felt more "correct". She was able to drop her pelvis before sitting down. Her neck released at the base and between the shoulder blades.

8th March

All the sitting, standing and lying movements seemed right and natural at this lesson.

N.B.

At her singing lesson the following day we worked on opening her "ah" vowel so that it was not so dark and covered. We noticed that her diaphragm had the habit of pulling inwards.

just before she started to sing. The following week she reported on a long singing practice that had left her throat tired and sore. So, at her next lesson we concentrated on expansion procedures like making sure the weight was evenly distributed across the feet; sitting on the stool with weight in the sitting bones and allowing the muscles to release between the sitting bones; concentrating on supporting a small "f" sound with energy in the lower abdomen before starting to sing; thinking about the tongue forward off the back of the throat; releasing the muscles of the lower abdomen at the same time as letting the tongue roll forward; working on releasing the corners of the mouth forwards to counter-act the pull back for higher notes.

We worked out a routine for setting up her body for practising so that she could use this instead of practising with habitual tensions:

release in back and neck

release ankles and take up "monkey" position

let jaw hang down, slightly forward

open palms to help open chest

make "ha" and "ya" sounds using the energy from the lower abdomen

Return to this routine when feeling tight after singing and between exercises.

24th April

On this occasion I asked an Alexander teacher to be present to help Case A with experiencing the releases she was wanting. She started with a conventional Alexander lesson on the chair and table and we continued with breathing releases on the table. The teacher taught her the "whispered ah" which entailed releasing the air out letting the back of the ribs fall right inwards, allowing them to spring back for the in breath, smiling at the back of the mouth and round the eyes, letting breath out on "A..a..ah". She was then asked to do the same thing while singing "ah".

20th July

At this point, all the singers and teachers involved in the project met to discuss ideas and explore further possibilities.

Case A made the following notes:

"Open "ah" leads to an open throat

Released body posture leads to released sound

Relaxed mouth position leads to open throat

Resonance only possible if sound reaches hard palate

Tongue should be relaxed between bottom teeth

Relaxed mouth feels as though lower lip is pouting forward slightly

Lower abdominal muscles should not reach their limit of energy before the end of a phrase

Back must be flexible in breathing

High notes - think of ribs feeding IN when experimenting with the 'up' for head voice."

10th October

Case A was always in favour of her singing lesson starting with some Alexander Technique. She felt that her singing worked much better when she had rid herself as far as possible of the tensions of work etc. She felt that she released particularly well on the table.

She sang short two and three note exercises with the Alexander teacher helping her connect her energy from the base of the spine through the top of the head, paying special attention to the hard palate. This was done while sitting on a high stool, then in the "monkey" position and then standing up, keeping the idea of sitting bones pointing to the floor. This prevented her from bending her head forward to try and find the resonance of the hard palate. (She needed this hard palate concentration for a while, because she had the habit of holding her voice in the throat, thus keeping it "woolly" in sound and unresonant). All the time she was reminded of thinking forward and up. When we worked on the breathing we suggested to her that she started with an idea of width (the Alexander teacher's hands helped with this) - in the lower back, "air cavities" behind the neck, space round the hinges of the jaw.

After five lessons with both myself and the Alexander teacher helping Case A attended approximately two Alexander lessons for every singing lesson. She began to use her improving body knowledge to good effect in her singing and her sore throats after her practice sessions became less frequent. Her range became far less strained in the higher register for C natural up to top B natural. She abandoned most of her contralto repertoire and even asked to try the soprano aria "Piangere la sorte mia" from Julius Caesar by Handel. She managed this without strain on the top A naturals. The flutter only reappeared in her voice when she was not concentrating and she knew exactly how to command her breath so as to prevent the flutter. Her mouth position was far more relaxed.

As can be seen in her outlines at figs. 11 - 14 and the measurements on Table 3, the shortened muscles in her lower back released considerably and must have played a major role in the improved command of her back.

The experience of teaching Case A initially without the help of Alexander lessons was most instructive. Her conceptions became clearer and her kinesthetic awareness definitely increased. I verified this with further students during the two years of the study with Case A and I developed a far greater sense of instinctive communication with the students who were improving their body use generally than with those whose body knowledge was relatively static.

Table 3 - CASE A

Measurement	9th March 1985	27th July 1985	Change
Weight	58.0 kg.	60.0 kg.	2.0 kg. more
Height	168.0 cm.	167.5 cm.	0.8 cm. less
Occipital Protruberance/ 7th Cervical Vertebra	12.5 cm.	11.4 cm.	1.1 cm. less
Sitting Height	79.5 cm.	88.3 cm.	8.8 cm. more
Neck Circumference	32.0 cm.	33.3 cm.	1.3 cm. more
Shoulder Width Back	42.2 cm.	41.0 cm.	1.2 cm. less
Shoulder Width Front	41.3 cm.	39.6 cm.	1.7 cm. less
Interscapulae Distance	8.7 cm.	10.8 cm.	2.1 cm. more
Ribs Exhaled	69.7 cm.	72.8 cm.	3.1 cm. more
Ribs Inhaled	75.0 cm.	78.5 cm.	3.5 cm. more
(actual expansion)	5.3 cm.	5.7 cm.	0.4 cm. more
Chest Inhaled	88.5 cm.	89.0 cm.	2.3 cm. more
Chest Exhaled	83.0 cm.	85.3 cm.	2.3 cm. more
Chest Normal	83.8 cm.	88.0 cm.	4.2 cm. more
Waist	68.0 cm.	68.5 cm.	0.5 cm. more
Arm Stretch Left	200.3 cm.	213.4 cm.	13.1 cm. more
Arms Stretch Right	199.7 cm.	212.8 cm.	13.1 cm. more
(left/right difference)	0.6 cm.	0.6 cm.	-
Left Leg Lying Down	92.5 cm.	89.0 cm.	3.5 cm. less
Right Leg Lying Down	93.5 cm.	89.0 cm.	4.5 cm. less
(left/right difference)	1.0 cm.	0.0 cm.	1.0 cm. less

These measurements were taken 20 weeks apart after 30 Alexander Technique lessons.

Weight: although this is a slight increase it was not thought that the measurements were significantly affected.

Height: an insignificant change in height.

Neck: 1.1cm. is a fairly large change of neck length. Case A evidently balanced her head closer to her centre and did less straining forward of the neck muscles.

Spine: an increase of 8.8cm. in the sitting height indicates that a great deal of releasing of tense muscles occurred in the back. The change can be seen between figs. 13 & 14 - the lordotic curve is less exaggerated after 30 lessons.

9th March 1985

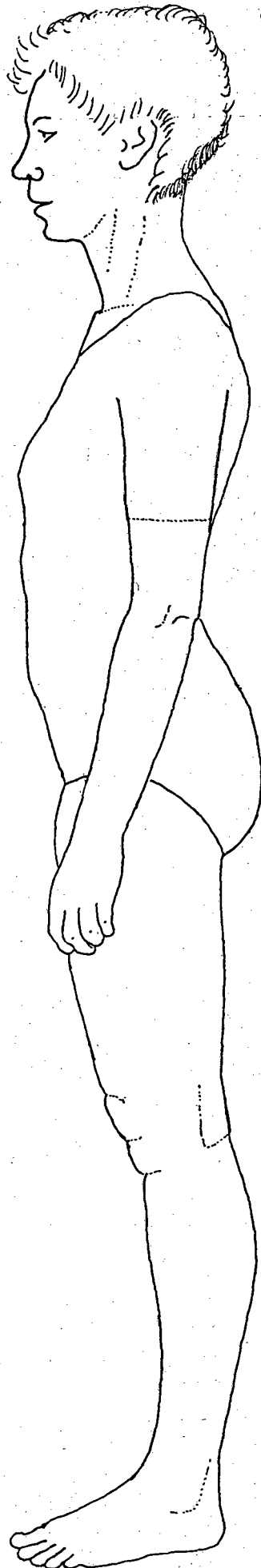


Figure 11.

27th July 1985

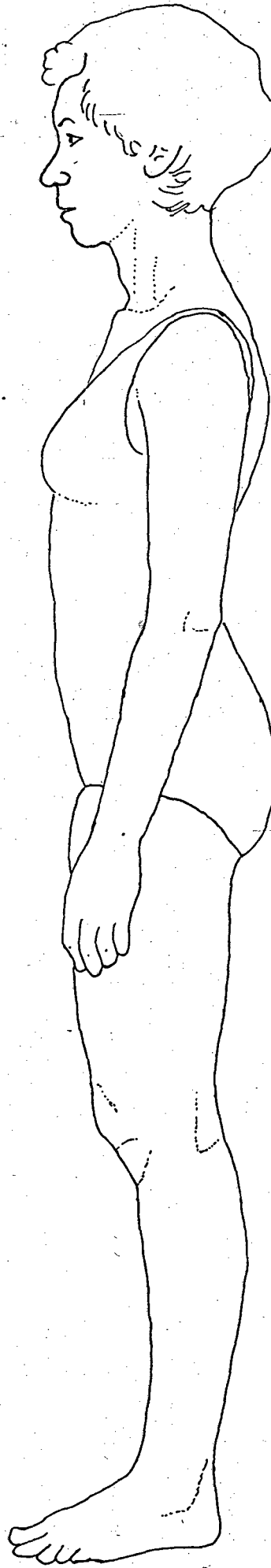


Figure 12.

9th March 1985

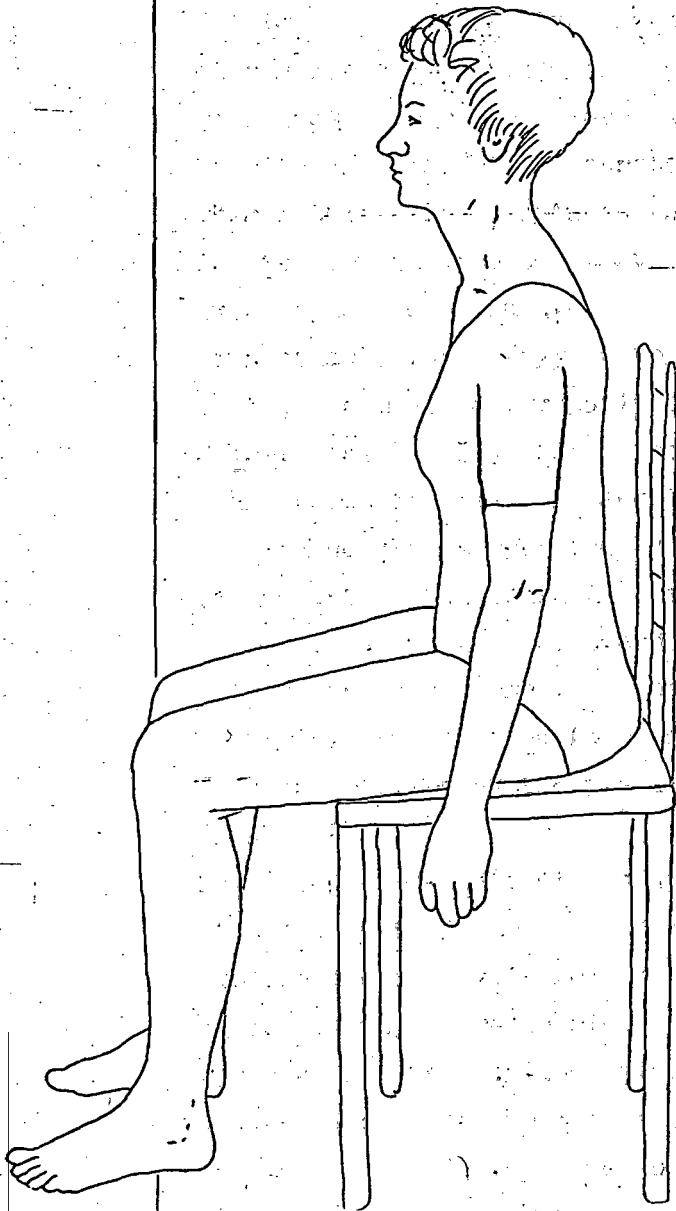


Figure 13

27th July 1985

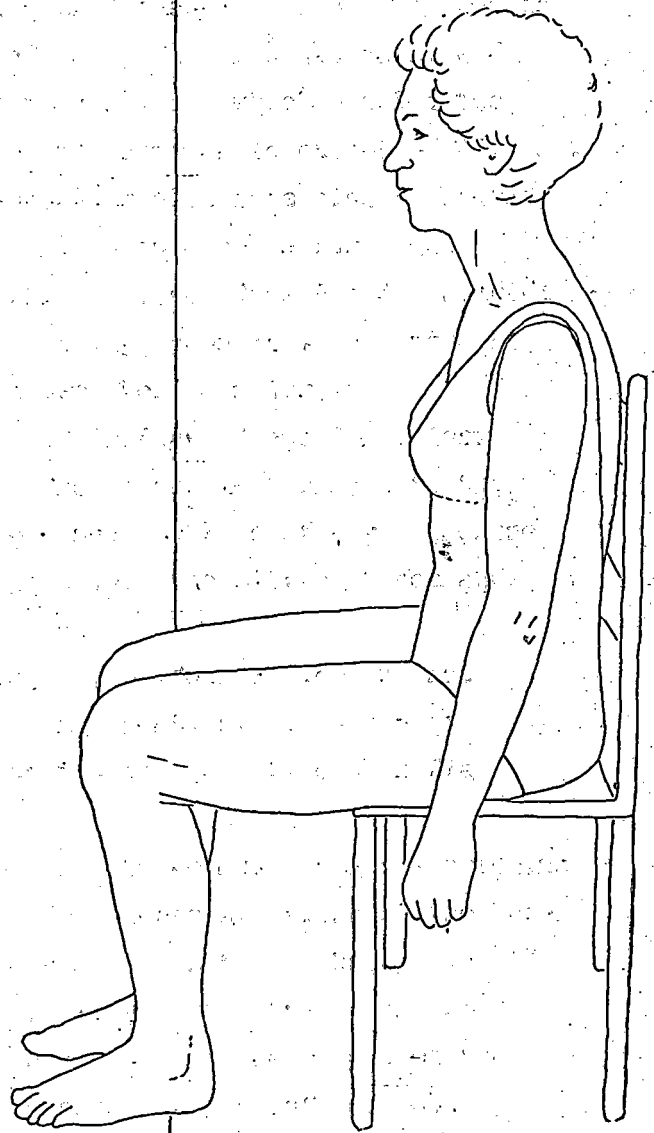


Figure 14.

CASE A

Shoulders: the excessive narrowing of the shoulder blades towards each other caused the narrowing of the back and unnaturally wide shoulders. This space was widened by 2.1 cm. which enabled the arms to increased their stretch by the remarkable extent of 13.1 cm.

Chest: this release between the shoulder blades is also reflected in the rib measurements - over 3 cm. is an encouraging amount of extra space for breathing flexibility. Since Case A had struggled with stimulating energy in her breathing mechanism, this release of tension must have greatly assisted her improvement.

Spine: The lordotic curve indicated in figs 11 and 13 is less exaggerated in figs. 12 and 14. The measurement change in the sitting height is verified by the visual outline of fig. 14 where the weight of the torso has released into the sitting bones and the back has released outwards slightly.

Pelvis: the measurement of the legs lying down indicated that the pelvis has dropped forward in the front, by 3.5 - 4.5 cm. This is verified by the visual outline of the buttocks in figs. 11 and 12.

Legs: the over-stretching of the front thigh muscles and shortening of the back thigh muscles that caused excess wrinkling of the knees has changed in fig.12 and the knees are less braced back. This assists with the redistribution of weight over the centre of the ankles. This balance gives more space to the organs of the abdomen and it can be seen in the visual outlines of the abdomen in figs 12 and 13 that the abdomen is flatter and more elongated after 30 lessons. More space gives more length to the muscles; more length gives more flexibility and strength.

As Case A's singing teacher, I was informed of her progress towards these improvements and the combination of her Alexander and singing lessons was timed according to her progress with releasing interfering tensions. The progress of her ability to direct release in her muscles helped us to decide when she was ready to use directions in her practice and singing lessons.

(We learned from the photograph used for fig. 11 that in profile the elbow covered sight of the lordotic curve, so we actually instructed Case E to hold her hands together for her profile - fig. 24 - so that her lumbar spine was visible.)

Table 4 - CASE B

Measurement	9th March 1985	24th July 1985	Change
Weight	52.0 kg.	52.0 kg.	-
Height	157.6 cm.	157.6 cm.	-
Occipital Protruberance/ 7th Cervical Vertebra	12.0 cm.	11.5 cm.	0.5 cm. less
Sitting Height	83.2 cm.	82.2 cm.	1.0 cm. less
Neck Circumference	31.8 cm.	30.8 cm.	1.0 cm. less
Shoulder Width Back	42.5 cm.	36.4 cm.	6.1 cm. less
Shoulder Width Front	39.8 cm.	35.5 cm.	4.3 cm. less
Interscapulae Distance	13.8 cm.	15.3 cm.	1.5 cm. more
Ribs Exhaled	67.8 cm.	66.3 cm.	1.5 cm. less
Ribs Inhaled	74.5 cm.	75.0 cm.	0.5 cm. more
(actual expansion)	6.7 cm.	8.7 cm.	2.0 cm. more
Chest Inhaled	84.2 cm.	87.7 cm.	3.5 cm. more
Chest Exhaled	80.2 cm.	80.8 cm.	0.6 cm. more
Chest Normal	81.5 cm.	84.0 cm.	2.5 cm. more
Waist	65.0 cm.	64.5 cm.	0.5 cm. less
Arm Stretch Left	200.6 cm.	202.7 cm.	2.1 cm. more
Arm Stretch Right	199.8 cm.	202.4 cm.	2.6 cm. more
(left/right difference)	0.8 cm.	0.3 cm.	0.5 cm. less
Left Leg Lying Down	87.9 cm.	82.3 cm.	5.6 cm. less
Right Leg Lying Down	87.6 cm.	82.4 cm.	5.2 cm. less
(left/right difference)	0.3 cm.	0.1 cm.	0.2 cm. less
These measurements were taken 19 weeks apart after 30 Alexander Technique lessons.			

Weight: no change.

Height: no change.

Neck: a small change of 0.5 cm. shorter seems to indicate that before her Alexander lessons she was stretching her neck back and up slightly. A comparison of the neck positions in figs. 15 and 16 bears this out. A reduction in the circumference of the neck indicates that her shoulders dropped away from her ears.

Spine: Case B's physical profile before Alexander lessons indicated that she had very tight muscles on either side of the spine. (She had been taking regular gym classes and decided to stop while involved in the thirty Alexander lessons.) Her change in sitting height - 1.0 cm. - shows that she released some unnecessary pulling of her back.

Shoulders: Case B's physical profile also stated that she was very tense round the back of the neck. The change in measurement of the back shoulders is vast - 6.1 cm. less. This is further indication that the shoulders dropped away from the ears and released a great deal of tension. The front of the shoulder also lost a great deal of tension as the upper arms dropped towards each other and the front of the chest released. Further indication of this release is the increase in the interscapulae distance by 1.5. cm. - the shoulder blades are no longer being held unnaturally high and the lower points of the shoulder blades have dropped down her back. An increase of over 2 cm. in her arm stretch is further indication that her shoulders released.

Chest: flexibility in the ribcage is indicated by the increase of 2 cm. in her rib expansion. Her ribs are able to collapse 1.5 cm. further towards her centre and expand 0.5.cm. outwards, giving an expansion gain that can be put to good use in her singing lessons.

Waist: a loss of 0.5 cm. is probably caused by her pelvis dropping down and away from her ribcage through loss of tension.

Pelvis: the pelvis has dropped away from the ribcage by over 5 cm. on each side .

Legs: it can be seen from a comparison of figs 15 and 16 that the knees have released during the Alexander lessons. The back of the thigh appears less shortened.

General Observations

Case B made repeated comments about how relaxing her Alexander lessons were. She also repeated in her diary and interviews that she was less tired generally, she was less anxious about her work and examinations, that she achieved a great deal more with her time, that she was not as scared of saying the wrong thing all the time. She was delighted with her measurement changes because her chest measurement increased by 3.5.cm. and her waist decreased by 0.5.cm. without having to attend the gym!

She thoroughly enjoyed her Alexander lessons, but was repeatedly subject to dizziness while lying on the table. She described this as a reluctance to "let go" her tension any further and decided not to continue after the thirty lessons because she did not feel ready to "let go". Her intention was to make use of Alexander at a later date.

CASE B

Figure 15.

9th March 1985

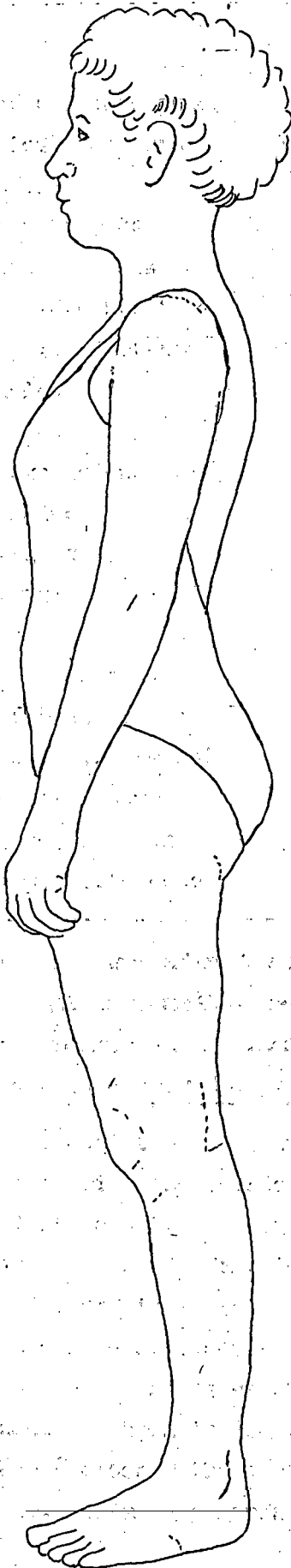


Figure 16

27th July 1985

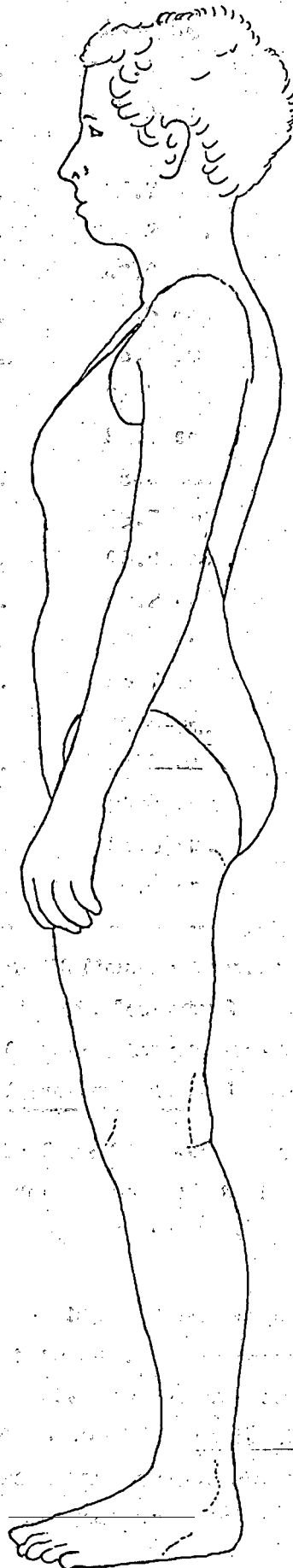


Table 5 - CASE C

Measurement	9th March 1985	7th September 1985	Change
Weight	64.0 kg.	64.0 kg.	-
Height	163.2 cm.	164.4 cm.	1.2 cm. more
Occipital Protruberance/ 7th Cervical Vertebra	10.0 cm.	8.5 cm.	1.5 cm. less
Sitting Height	86.2 cm.	86.7 cm.	0.5 cm. more
Neck Circumference	34.4 cm.	33.2 cm.	1.2 cm. less
Shoulder Width Back	43.7 cm.	42.0 cm.	1.7 cm. less
Shoulder Width Front	41.0 cm.	37.5 cm.	3.5 cm. less
Interscapulae Distance	12.2 cm.	16.0 cm.	3.8 cm. more
Ribs Exhaled	75.5 cm.	72.0 cm.	3.5 cm. less
Ribs Inhaled	81.8 cm.	80.6 cm.	1.2 cm. less
(actual expansion)	6.3 cm.	8.6 cm.	2.3 cm. more
Chest Inhaled	97.7 cm.	95.7 cm.	2.0 cm. less
Chest Exhaled	90.3 cm.	90.0 cm.	0.3 cm. less
Chest Normal	93.5 cm.	92.2 cm.	1.3 cm. less
Waist	72.6 cm.	72.6 cm.	-
Arm Stretch Left	208.1 cm.	208.7 cm.	0.6 cm. more
Arm Stretch Right	209.5 cm.	210.9 cm.	1.4 cm. more
(left/right difference)	2.8 cm.	0.8 cm.	2.0 cm. less
Left Leg Lying Down	92.7 cm.	86.3 cm.	6.4 cm. less
Right Leg Lying Down	93.5 cm.	86.5 cm.	7.0 cm. less
(left/right difference)	0.8 cm.	0.2 cm.	0.6 cm. less

These measurements were taken 26 weeks apart after 30 Alexander Technique lessons. There was also a break of one month between her last Alexander Technique lesson and the taking of the measurements, which indicates that Case C retained the evidence of muscle release in her body even when she had had a break from Alexander Technique lessons.

Weight: although there was no change in Case C's body weight, she was told repeatedly during the course of Alexander lessons that she looked as though she had lost weight. A comparison of figs 17 and 18 shows a generally more streamlined effect in fig. 18.

Height: 1.2 cm. is a small change in height. It was interesting that Case C commented several times that she felt taller.

Neck: the change in the relationship of the head to the central vertical line of the body is shown in figs. 17 and 18 - the head is further back on the spine, has shortened the distance between the occiput and seventh cervical by 1.5 cm. while lengthening and the distance between the ears and the shoulders.

9th March 1985

CASE C

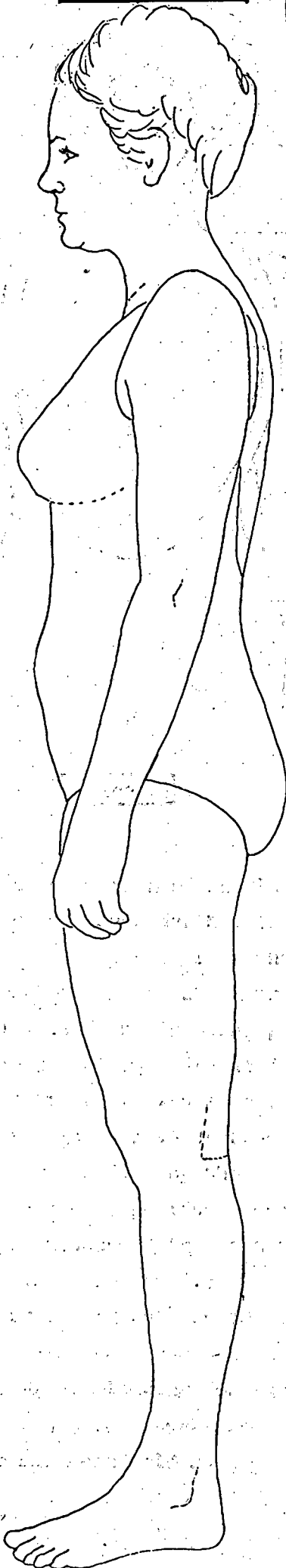


Figure 17

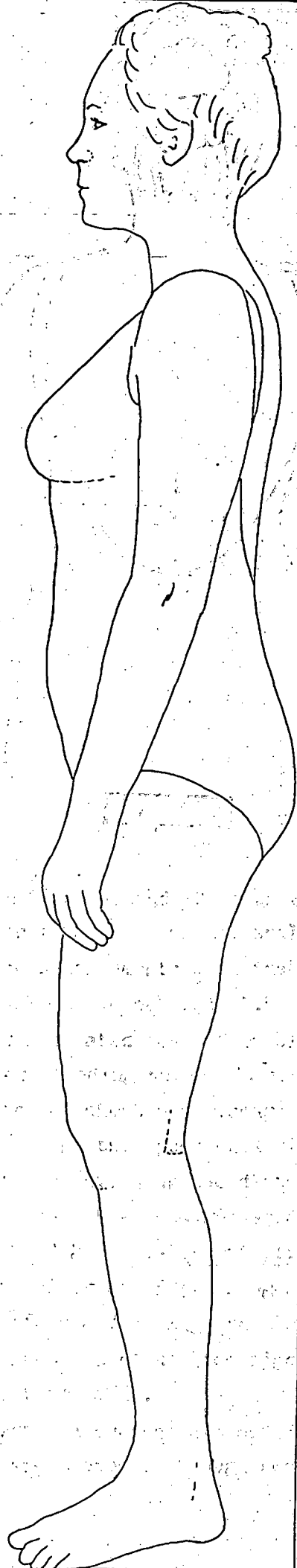


Figure 18

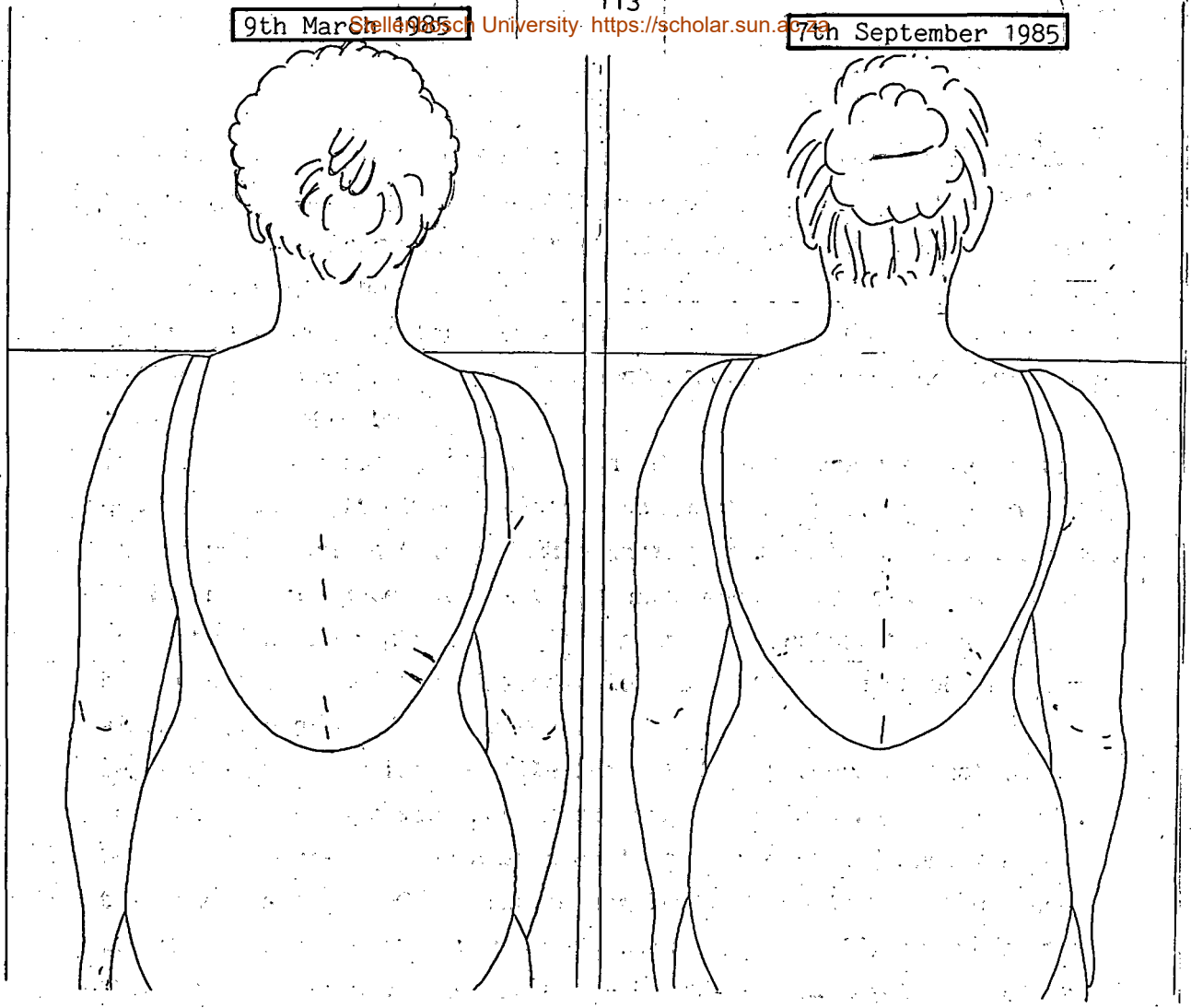


Figure 19

CASE C

Figure 20

Shoulders: a comparison of shoulder levels in figs. 19 and 20 shows a remarkable change - the left shoulder has dropped away from the ear and the whole of the right side of the back is less shortened. The measurements show that there is less tension held in the shoulders, as the back expanse has lost 3.5 cm. and the front has lost 1.7 cm. Physical profiles also indicated loss of shoulder tension.

Spine: the slight changes in sitting height and standing height do not signify.

Chest: a pattern of expansion is apparent in the chest and ribcage area. The shoulders blades have dropped back and down and the upper chest is more open. This is verified by the measurement of the interscapulae distance - an increase of 3.8 cm.; residual tension in the upper chest has released and the chest and rib measurements are smaller; however, the actual flexibility of the ribcage has increased by 2.3 cm. - the most vital aspect for a singer. Analysis of her own breathing pattern and intentions before and during the Alexander lessons indicated that she was aware of her breathing being "too high" at times and she was always looking for ways of "supporting down".

Waist: Case C was very surprised that her waist measurement had not changed because she had been told so many times that she looked as though she had lost

weight. We came to the conclusion that she must have redistributed her weight and an examination of her visual outlines at figs. 17 and 18 shows a lengthening of her abdominal wall with the resultant loss of a slight bulge.

Arms: the release of tension on the right side of Case C's body is reflected in the increase of her arms stretch more on the right side than on the left. by 1.4 cm.

Pelvis: a comparison of figs. 17 and 18 shows a considerable visual change in the tilt of her pelvis - the distance between the front tip of her pelvis and her inner ankle having dropped by 6.4 cm. and 7 cm. It is interesting to note that her shortened right side was again reflected in the right hip being higher off her feet than her left hip, and that after the Alexander lessons both sides of the hip are almost equidistant from the feet.

Legs: Case C' physical profile indicated that there was habitual tension in her legs with her knees normally braced back. (fig. 17). During the course of her Alexander lessons she stated more than once that she was aware of tension in her legs. The flexion of her knees is somewhat exaggerated for the photograph at fig. 18, but it shows that she has released the crease of tension in the gluteal muscles and lengthened the back of the thigh.

Face and Eyes: a comparison of figs. 17 and 18 shows a remarkable change in the mould of the face - the eyes look level with no strain and the slight double chin has disappeared. Case C's performing profile stated that she was often reminded to lift her chin while performing and this change in normal stance would help towards conquering this old habit.

General Observations

Case C made very intelligent use of her Alexander Technique - she lay on the floor to release tension before recitals and said it helped her; she realised the value of widening the lower back; she experimented with suspending her body from her crown and letting her knees do the walking; she fully intended to continue her Alexander lessons she she settled into her new work at the opera house.

She also experienced a phase of disorientation which passed when she began to understand the value of releases.

Table 6 - CASE D

Measurement	16th March 1985	4th August 1985	Change
Weight	71.0 kg.	75.0 kg.	4.0 kg more
Height	168.0 cm.	170.2 cm.	2.2 cm. more
Occipital Protruberance/ 7th Cervical Vertebra	11.5 cm.	11.5 cm.	-
Sitting Height	88.3 cm.	87.7 cm.	0.6 cm. less
Neck Circumference	38.3 cm.	38.8 cm.	0.5 cm. more
Shoulder Width Back	47.0 cm.	48.0 cm.	1.0 cm. more
Shoulder Width Front	45.7 cm.	44.0 cm.	1.7 cm. less
Interscapulae Distance	14.4 cm.	15.4 cm.	1.0 cm. more
Ribs Exhaled	91.0 cm.	96.2 cm.	5.2 cm. more
Ribs Inhaled	98.0 cm.	103.2 cm.	5.2 cm. more
(actual expansion)	7.0 cm.	7.0 cm.	-
Chest Exhaled	94.3 cm.	100.3 cm.	6.0 cm. more
Chest Inhaled	102.5 cm.	108.5 cm.	6.0 cm. more
Chest Normal	98.7 cm.	105.0 cm.	6.3 cm. more
Waist	87.2 cm.	93.0 cm.	5.8 cm. more
Arm Stretch Left	220.7 cm.	222.0 cm.	1.3 cm. more
Arm Stretch Right	222.5 cm.	224.5 cm.	2.0 cm. more
(left/right difference)	1.8 cm.	2.5 cm.	0.7 cm. more
Left Leg Lying Down	93.5 cm.	88.2 cm.	5.3 cm. less
Right Leg Lying Down	95.1 cm.	89.8 cm.	5.3 cm. less
(left/right difference)	1.6 cm.	1.6 cm.	-
<p>These measurements were taken 22 weeks apart after 30 Alexander Technique lessons. The increases in the girth measurement cannot be accurately commented upon because CASE D increased his weight by a significant amount (4 kgs) which meant that the changes were obviously not only due to muscle releases.</p>			

Weight: an increase in body weight of 4 kgs. unfortunately disguised all the girth measurements. In spite of the increase in weight, however, Case D wrote repeatedly in his diary that he felt lighter, freer, "airborne", that his ribs did not weigh anything and that many friends commented that he had lost weight.

Height: a change of 2.2 cm. in overall height, with no increase in his neck or spine, indicates that Case D lost some tension in his legs. His physical profile stated that before his Alexander lessons his legs were extremely tense and his feet were "unconnected" with his body.

Neck: it can be observed in figs. 21 and 22 that there is less shortening in

16th March 1985

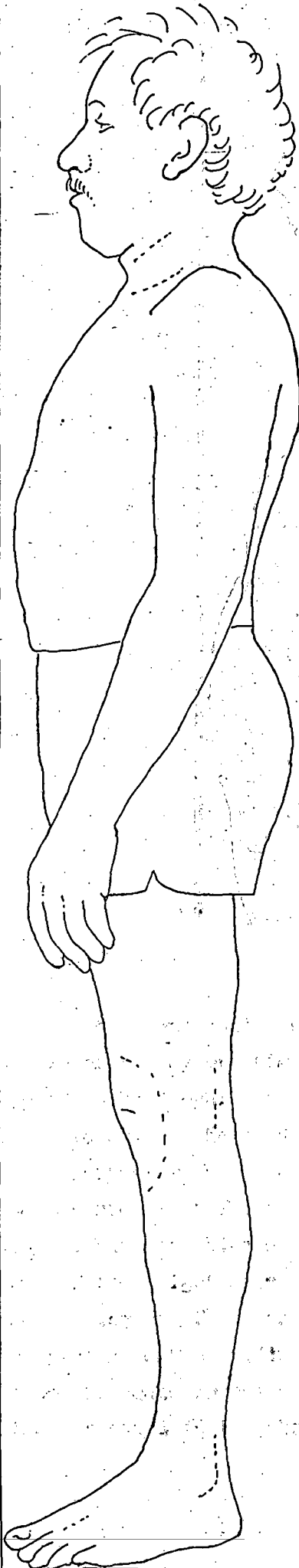


Figure 21

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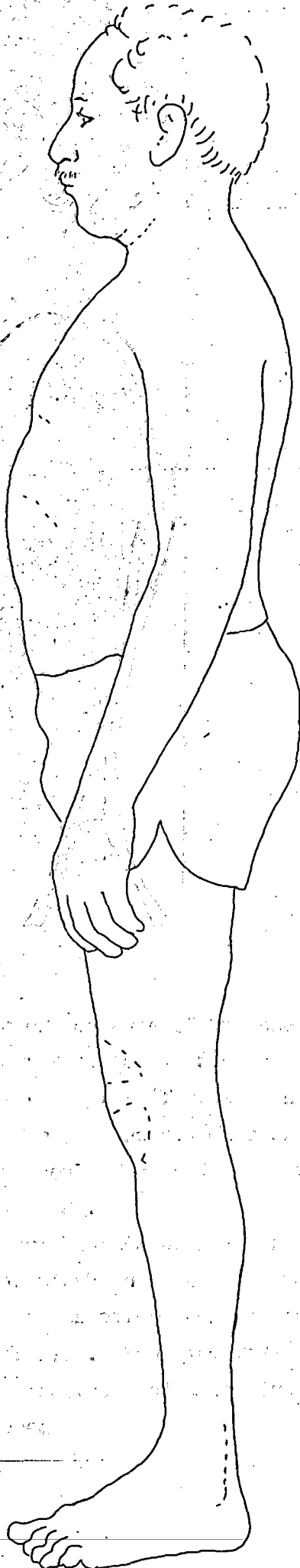


Figure 22

CASE D

CASE D



Figure 23

front of the throat and less pulling back of the base of the skull. To make this even clearer, fig 21 has been superimposed on fig 22 to show how the head has rebalanced on the tip of the spine (fig.23). His physical profile stated that he held his head too far back on his body which was causing shortening in the back and a great deal of shoulder tension. This can be observed in the clear outline of fig. 23.

Shoulders: the smoothing out of the shoulder hump (kyphosis) is very clear. In spite of the weight gained, the shoulder width in front shows a decrease in the holding up of the shoulders and a much smaller increase in width than the 5 or 6 cm. extra girth implied in the ribs, chest and waist measurements.

Arms: the increase in arm stretch and interscapulae distance indicates that tension has eased in the shoulder blade area.

Pelvis: a careful examination of figs. 21 and 22 shows that the balance of his whole body weight on the tip of his spine has moved forward and this has included a dropping of the pelvis towards his feet by over 5 cm.

Legs: the knees appears thicker and more "locked" in fig. 21 and, in spite of the obvious tension in his toes in fig. 22, his knees seem more flexible and the legs look longer.

General Observations

The most remarkable feature of Case D's lessons was his detailed diary and tremendous enthusiasm. He had been working on the baritone-tenor change for a long time and was always looking for ways to make this change easier. After 8 Alexander lessons his singing teacher stated that his breathing had definitely improved - he was using his lower back ribs more and was less tense in the diaphragm area. She also said that his vocal timbre had changed. He felt that the ability to achieve a fuller Top A natural had a tremendous effect on his self-confidence.

He made repeated reference to improvements in the quality of his life. He was developing the confidence to stand his ground in social relationships and related this to the improved use of weight in his feet. He thought his concentration improved. His speaking voice resonated quite differently during Alexander lessons. One year later he was still attending his Alexander lessons and his teacher commented that the tension in his legs had finally eased to a remarkable extent.

Table 7 - CASE E

Measurement	9th March 1985	27th July 1985	Change
Weight	55.0 kg.	53.0 kg	2.0 kg. less
Height	166.5 cm.	165.8 cm.	0.7 cm. less
Occipital Protruberance/ 7th Cervical Vertebra	11.2 cm.	11.8 cm.	0.6 cm. more
Sitting Height	85.0 cm.	86.0 cm.	1.0 cm. more
Neck Circumference	33.0 cm.	31.8 cm.	1.2 cm. less
Shoulder Width Back	44.3 cm.	46.0 cm.	1.7 cm. more
Shoulder Width Front	44.4 cm.	41.0 cm.	3.4 cm. less
Interscapulae Distance	13.6 cm.	13.4 cm.	0.4 cm. less
Ribs Exhaled	70.3 cm.	71.0 cm.	0.7 cm. more
Ribs Inhaled	74.9 cm.	76.4 cm.	1.5 cm. more
(actual expansion)	4.6 cm.	5.4 cm.	0.8 cm. more
Chest Inhaled	88.0 cm.	91.5 cm.	3.5 cm. more
Chest Exhaled	81.8 cm.	86.0 cm.	4.2 cm. more
Chest Normal	83.6 cm.	87.3 cm.	3.7 cm. more
Waist	67.0 cm.	67.0 cm.	-
Arm Stretch Left	218.0 cm.	217.5 cm.	0.5 cm. less
Arm Stretch Right	219.1 cm.	219.0 cm.	0.1 cm. less
(left/right difference)	1.1 cm.	1.5 cm.	0.4 cm. more
Left Leg Lying Down	97.0 cm.	87.5 cm.	9.5 cm. less
Right Leg Lying Down	97.4 cm.	88.0 cm.	9.4 cm. less
(left/ right difference)	0.4 cm.	1.5 cm.	1.1 cm. more
These measurements were taken 20 weeks apart after 30 Alexander Technique lessons.			

Weight: the loss of 2 kgs. is not particularly significant.

Height: the small loss in height is interesting in view of the slight gain in sitting height and the loss of length in the front of the leg.

Neck: Case E's physical profile and her overriding habit in singing was poking her head forward in movement. The strain this caused can be seen in fig. 24 both by the tension marks in the front of her neck and the protruding cervical vertebrae at the back. This tension has eased in fig. 25.

Shoulders: her physical profile also stated that she held her shoulders up and back with a great deal of tension and in her early Alexander lessons she stated that letting go of the tension felt as though her arms would fall right off. The poking out of her shoulder blades has visibly lessened

9th March 1985

CASE E

27th July 1985

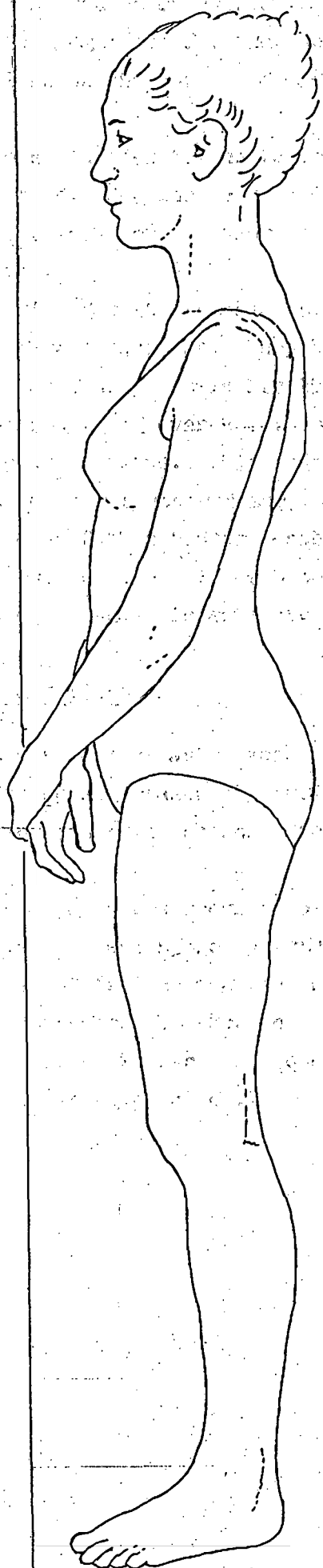


Figure 24

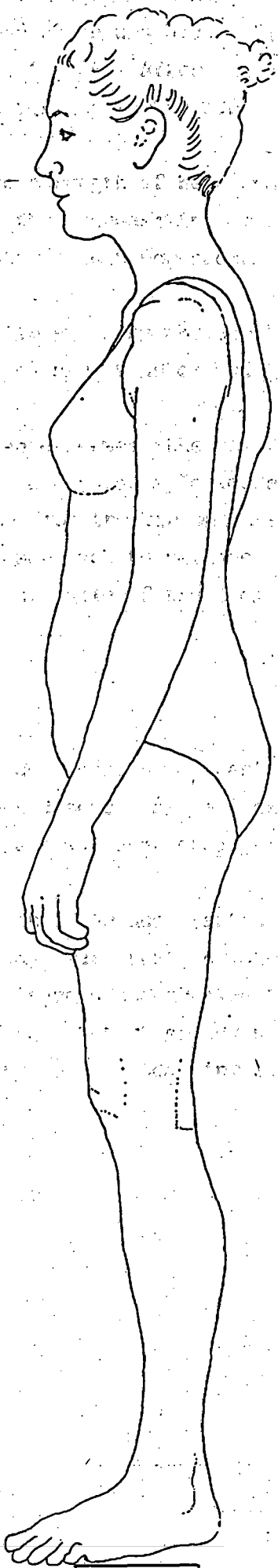


Figure 25

between fig. 24 and 25. The measurements bear this out by showing that the arms have released downwards and the arms seem slightly longer.

Spine: Case E had an excessive lordotic curve which was hidden by her arms when hanging loose for the photograph at fig. 24. After the 30 Alexander lessons the curve had eased enough for the lumbar curve to be visible.

Chest: Case E had been trying to increase the strength of her breath support for a long time. She was very encouraged by the increase in her rib and chest measurements and her singing teacher stated that her breath support was improving.

Arms: Case E's arms stiffened considerably while she sang and the habit was present in normal movement. They have released some tension and hang more freely from the shoulders in Fig 25.

Pelvis: the change of over 9 cm. in the distance between the pelvis and the inner ankle is enormous. This indicates that a considerable amount of tension was held in the lower abdomen and could account for the minimal breath support. Releasing some of this tension enables the lower back to release and the lordotic curve to ease. It also means that the whole of the length from the heels to the skull is more streamlined.

General Observations

Case E was very enthusiastic about her Alexander lessons and kept a careful diary. She became reasonably articulate when discussing the Alexander Technique and continued lessons after the project was completed.

She suffered from a few weeks of disorientation after she started the course of lessons which she described as being aware that her use was not adequate but feeling that she had not yet learned enough direction to be able to change it. But she passed through that stage and used her experience of Alexander Technique to improve her own teaching skills during her teaching practice.

VI CONCLUSIONS

Application of Knowledge Gained from Case Studies

I taught four other students singing at the same time as Case A, initially without Alexander Technique lessons and, after 9 months, with Alexander lessons between their singing lessons.

The tenor: started with very poor posture after suffering a broken neck in a car accident and resultant deterioration of his vocal mechanism. He had good natural ability for perceiving improved sound which made him realise that his voice was suffering. He had little command over postural improvement in the first nine months of singing lessons, although he did improve his sound. After ten Alexander lessons, he suddenly realised why postural change was necessary and he began to improve very fast. Within 6 months of his first Alexander lesson, he was accepted as a chorister at the local opera house.

The mezzo-soprano: made steady progress improving her sound during her first 9 months of singing lessons. We tried on several occasions to increase flexibility in her lower back, but it seemed fixed into an old habit of protection against a previous injury. The Alexander lessons eased this immobility and she slowly began to find her singing skills much less effortful.

The soprano: started singing lessons with me after many years of very poor singing instruction and had a vocal break for the entire octave above middle C. Her breath lasted for only three or four notes and her passagio notes were always flat. It took her a long time to appreciate why postural interferences also interfered with her sound, but after she started Alexander lessons she was much more positive about the need for change and her rate of progress increased. She made some important career changes after a year of Alexander lessons and developed a more positive attitude about many aspects of life. By the end of two years she could execute long coloratura runs in Handel arias without any strain on her breath.

As with Case A, these singers took Alexander lessons with experienced teachers who were willing to discuss their progress with me. Sometimes the development took us by surprise, but often I asked the student to request help with certain releases that were needed for the next stage. The Alexander teachers also informed me if there had been a sudden improvement in a tense area and I could try to use that information. Usually it was obvious from the student's understanding that progress had been made.

Examples of details of progress can be found in Case studies B - E.

Case B: her greatest area of tension was in her shoulders and neck. This was also the area that showed the greatest release. Her singing teacher said that her upper register tended to lose its quality and become "white". Once the student and singing teacher become aware of such tension release in the shoulder, there can be a more positive approach to the learning of more resonant upper notes.

Case C: she suffered from tension mostly in her ribs and legs. Before her Alexander lessons she was able to breath with her whole torso while sitting, but would lose the abdominal/lower rib connections when she stood up to sing. Her increased flexibility in the ribcage indicated a great improvement in the exhalation ability - in other words she came in closer contact with the reflex-facilitated spring of the ribs that results from singing with the final quantity of air flow in the lungs.¹ This realisation can help considerably with breathing instruction. The knowledge that the legs are less tense can also be put to good use in singing lessons by using the "monkey" position for freeing notes that tend to become constricted.

Case D: the release of tension round the shoulders and back of neck can be used to explore new sensations of placing upper notes.

Case E: her increased rib capacity can be used to put new energy into her breath support system, so that she does not have to imagine that her breath will always be minimal.

The above are brief examples of successful and possible liason between Alexander and singing teacher via the student. Naturally, it is not expected that such detailed measurements are necessary to detect change. In time, the changes become self-evident. Even after I reached a level of expertise in my own training when I could assist the student towards changes in muscle use, I found it preferable to work from the student's own understanding of his improved muscle use, as gained away from his singing lessons, rather than being fully responsible for assisting his general muscle re-education as well as improving his singing skills.

1. See p.136

Interferences

One of the most important concepts that I learned from studying Alexander Technique at the same time as singing was the concept of interfering with the sound. During the course of my first thirty lessons I became aware of most of my own interferences and understood that in time I would be able to learn how to inhibit most of them with a view to eliminating them from my singing action. I knew at this stage what muscular action was necessary for producing good sound, but at first I was not aware that I was introducing many more actions that were not necessary for good sound. Once I became aware of these inappropriate actions, I understood that the interference was a muscular movement that

- a) did not help to produce good sound;
- b) used up energy as a result;
- c) disturbed the poise of the body in performance;
- d) channelled energy away from the appropriate and necessary muscular action;
- e) invariably became stronger and more noticeable and used up more energy in the most demanding passages of a song or exercise and in the various passaggi of the voice.

In my case these interferences could be defined as

- a) working upwards in my shoulders as the pitch entered head voice range;
- b) increasing further tension in the left shoulder and elbow in difficult passages;
- c) shifting my body weight to my left foot in difficult passages;
- d) tightening the muscles in my right leg/hip joint on high notes;
- e) stiffening the back of my neck for the range from top A upwards;
- f) pulling my abdomen and epigastrium inwards at the end of my breath capacity;
- g) pushing out my lower back and dropping my chest when I wanted firm breath support;
- i) tipping forward on my toes for high notes and hence tightening in my feet.

I observed these exact interferences in my own students over and over again, plus many others in different parts of the body. One of the commonest was the lifting of the left shoulder. Case A had an interesting little double jerk in her abdomen before she began a

phrase. Case E and I both had the amusing experience of feeling a teacher hold our left arms while we were in full spate singing a song and finding that it stopped the voice! We had both got our left arm interference so involved with the mechanism of singing that we could not sing without heaving the sound out with the left arm. Pure common sense told us that the left arm cannot possibly produce sound and that it is in no way connected with the breath support system; but we - and countless other singers - use the left arm, for "breath support" unconsciously. Once one has tried and succeeded in overcoming such an interference that is relatively obvious to understand and therefore to inhibit, it then becomes easier to imagine and succeed in inhibiting interferences like stiffening the back of the neck. The most exciting step is the far more subtle inhibition of letting go tension in the throat and achieving instant mental direction over the opening of the throat. This means that the decision to open the throat can be timed with the appropriate energy from the breathing muscles, at the appropriate stage of a warm-up session or an aria, or at the appropriate pitch of the voice.

This power of inhibition can be used more and more during Alexander Technique lessons, with the teacher's help at first and then through the student's own directions. As the student's confidence and success grow the inhibition starts to work in singing lessons when the singing teacher points out an unnecessary interference. The same muscles that tend to interfere in singing lessons are usually the same ones that interfere to a lesser extent in daily movements, so, as the Alexander Technique begins to affect the ordinary daily movements, the ability to change interfering habits in singing lessons increases.

BREATHING

"It is the mind behind the muscles which enables man to do the things which we consider peculiarly human." ¹ These words were said by Phillip Tobias, Professor of Anatomy and Dean of Medicine at the University of the Witwatersrand in Johannesburg. He takes this observation right into the essence of great singing when he describes his reaction to hearing Joan Sutherland singing Bellini: "...when we hear such singing, we are listening to the music of the muscles, the sounds of contraction, as it were. We are receiving an auditory glimpse of what the muscle tone and flickering may be like, a sort of transubstantiation of the silent music of the body into tangible, registrable musical notation." ²

It could be argued that if a singer does not have a high degree of such muscular tone and co-ordination as a natural gift, then he has no business presenting himself as a soloist before a paying public. However, we are confronted with the reality of every possible combination of the complexity of skills required to produce a singer among both students and professionals. Some skills have to be learned painstakingly, others come quite easily and naturally, some are lost in the process of gaining others, some disappear under pressure and so on. As singers and teachers we have the responsibility of keeping the balance between the singing and the acting, the standards and the career, the pressure of work and the quality of life, the fulfilment of individual potential and the response to outside demands - the balancing act is continual and cannot be ignored.

All this is made much more difficult if the breathing system loses its balance. It became vital to me to rediscover a balance in my breath support and the joy of this discovery is relived with every student who is prepared to go through the re-examination of their breathing and its role in creating tone and carrying out phrasing. The vocal casualties that assault the ear from the performance platform are sufficient evidence that not many singers have the patience or the guidance to tackle this problem sensibly.

1. P. V. Tobias, MAN The Tottering Biped, The Evolution of his Posture, Poise and Skill, Lecture on Proprioception, Posture and Emotion at Univ. of New South Wales, 16th February 1981, p. 56.

2. Ibid., p. 55.

Releasing the breathing mechanism is an integral part of the Alexander Technique and breath control is taught in yoga, meditation and countless other disciplines. It is of vital importance that singing teachers are no longer confused about how to achieve a balanced breath control because an imbalance not only causes vocal problems in the long term, but could have more profound effects on the whole being of a singer. This possibility was suggested to me by a comment by Emma Jung (Carl Gustav's wife) in her paper on "Animus and Anima" -

"Perhaps the organs of breathing have a peculiar relationship to spirit, as is suggested by the words animus or pneuma and Hauch, breath, or Geist, spirit, and therefore react with special sensitivity to the process of the spirit." ¹.

The study of the relationship between balanced breathing and balanced personality is a whole field of enquiry on its own. I certainly feel that the improvement in the balance of my own breath control has led to improvements in my control of nerves, my phrasing, my interpretation, my presentation, my self-image as a singer, my figure, my ability to communicate to students the sensations of breath support and above all, my ability to achieve effortless sound. All these things have improved my relationship to my work and certainly helped to create a better balance in my life.

Every student has come to me with a different combination of breathing skills. Those that have absorbed the details of breathing support the quickest have been the ones who have had no singing lessons at all. This bears out Alexander's premise that the learned habits are the hardest ones to unlearn. There have been some remarkable moments in the students' learning processes. One soprano took about three singing lessons to become aware of all the different muscles involved in breath support and, when this picture was completed for her, she immediately gave up smoking. Another soprano, after ten lessons, began to understand the importance of preparing her muscles to sing between phrases - she then claimed that she was using her improved breath support to break a life-long habit of rushing from one thing to another all day long. One baritone claimed that the process of learning how to take his voice higher and fuller than ever before in his fourth lesson by using his full breath support actually launched him into a new phase in his work as an artist. What these three cases have in common is the observation from the students that the improved breathing also

1. E. Jung, "Animus and Anima: Two Essays by Emma Jung", pp 9-10.

improved the quality of their existence outside singing. Even if it is only a remote possibility that the converse is true - i.e. imbalanced breath control adversely affects singers' existence outside singing - the task for the singing teacher and singer to find a good balance is essential.

This task is not made easier by the fact that every individual's breathing balance is slightly different from the next. The mechanism is also altered by the amount of air taken in with inspiration. In his book The Body Moveable, David Gormon, an Alexander Technique teacher who has synthesised descriptions and drawings of the mechanics of the musculoskeletal system, makes the following statement -

"The balance between descent of the diaphragm and protrusion of the abdominal wall (abdominal breathing) and the elevation of the ribs (thoracic breathing) varies in different individuals and with the depth of respiration. The thoracic element is usually more marked in females and in both sexes in deep inspiration." ¹.

This element of variation in the mechanics of breathing eliminates the possibility of developing a "blueprint" for breathing instruction. The wisest course to follow is to develop the muscle tone of all the breath supporting muscles and then develop the singer's awareness of whether or not he is making use of all of them to produce a particular sound, and to learn to listen to the effect on the vocal tone when certain elements of the breath support system are missing. This gives the singer one of the most valuable tools in awareness and control - a sense of choice. It brings even the singer with a very average vocal instrument nearer the satisfying experience of making what Tobias calls the "music of the muscles".

It emerged clearly from my own experience and from the case studies that the postural framework has a direct bearing on the potential of the breathing support system. This seems like an unnecessary statement of the obvious because most of the books about singing training involve a discussion about posture. One of the most detailed analyses of the problem can be found in Van A. Christy's book "Expressive Singing" where he devotes seven pages to the following principle: "Vital, upright, expansive posture is the third great fundamental in singing." He states "Good posture will not be learned easily and quickly through brief study and only

1. D. Gormon, The Body Moveable, P.138.

intermittent observance only for short intervals at a time in the vocal period; it is necessary that correct posture become an habitual, natural attitude in class and out." ¹.

Both the singer and the singing teacher come up against the same problem demonstrated by Alexander at this point - that, although they both know that certain postural attitudes are detrimental to good breath control and vocal tone, their only guide towards correcting that attitude is the singer's awareness of how the old habit feels and his ignorance of how the new habit should feel. Because our feelings are untrustworthy the singer's tool of the sense of feel is at best slow to change, at worst an obstacle to experiencing a new sensation. However detailed Van Christy's account of ideal posture may be, it does not overcome this problem of debauched kinesthesia.

This is where Alexander Technique contributes to solving the dilemma. It is best to illustrate this by an example. Van Christy states "If the small of the back is allowed to relax in a pronounced curve, it is impossible to obtain the necessary resistant tension in the diaphragm and muscles of the back ribs for adequate breath control." ². This showed itself to be true in Cases A and E of the study project. However, both Case A and E had been trying to learn adequate breath control at the same time as using their backs with pronounced curves in their everyday movement. The muscles were so accustomed to being contracted in this position that they had ceased to send correct feedback to the brain about the state of their contraction. So, however hard the singers might try to mobilise their lower back rib muscles to assist the diaphragm action, they would fail to improve this vital part of their support mechanism. Of the six singers examined in the study, Cases A and E displayed the least amount of energy in their breath support.

After the course of thirty Alexander Technique lessons, both showed visual signs that the pronounced curve had eased - widened and lengthened. The measurements indicated that their space in the lower back had increased. The next step would be to take advantage of the newfound flexibility and help them to consciously use the lower back more constructively in the whole support system.

1. V.A. Christy, *Expressive Singing*, pp. 33.

2. *Ibid.*, p. 37. By "relax", Van Christy presumably means collapsed inwards.

This is when the teacher's awareness of the student's development in the process of studying the Alexander Technique can be put to constructive use. There is no point in asking a student to be flexible in the lower back until the flexibility returns to those muscles. Once there are signs that the student can exercise some mental control in this area, then the teacher can advise about how and when to use these muscles.

Regular lessons in the Alexander Technique help the singer in the following ways:

1. Muscles that are too tense to give feedback to the brain begin to release their tension and begin to respond to mental direction.
2. Directing mental instructions to certain muscles in the breath support system is the first step towards gaining control over these muscles.
3. Energy then follows thought and the muscle begins to play a role in producing improved vocal tone.
4. Increased awareness and power of mental direction benefits the singer in every aspect of acquiring singing skills and is put to constructive use at every stage of the process.
5. Undoing the tension helps the singer become aware of the natural reflexes of the body and enables him to make maximum use of the natural flow of energy before deciding how much "doing" is necessary in the breath support system.
6. Awareness can be used constructively to examine the reasons for changing habitual tensions, instead of the common situation of living with recurring vocal faults. Undoing tension facilitates the solving of recurring vocal faults and makes the recognition of them a more positive process.
7. In time the singer becomes aware of how much actual "doing" is necessary to create the required breath flow for the quality of tone desired.

I have found that the practice of applying these benefits grows daily with each student and with each practice session of my own. Naturally some of the directions I used in my own sessions I show to my students and they in turn contribute their reactions to using these directions. In this way we have built up the core of some good working directions for increasing the efficiency of the breathing muscles. As outlined in my first six months of attempting to combine singing and the Alexander Technique, I had to understand what my singing teacher was explaining and then use whatever newly acquired insight into my muscle use I had to put into practice the advice given in my singing lessons.

The methods of communicating information about new ways of using the breathing muscles I picked up from all the singing teachers I have met in New York, London, Europe and South Africa.

1. Words: A verbal description is quickest and sometimes enough to stimulate the desired action in the student. More often than not it requires further amplification. But when talking about the deepest layers of muscle in the abdomen, for instance, one only has words because these muscles are not accessible to touch and can only respond to mental direction and visualisation. An example is the idea of using downward support deep inside the abdomen - a difficult concept to teach because of the apparent inaccessibility. I was given two excellent descriptions in words which helped me to conceptualise the action:

"Imagine you have a diamond shape drawn horizontally between the two front protruberances of your pelvis, your pubic bone and your coccyx. Imagine that there is a pliable diaphragm across this diamond and that you can apply varying amounts of pressure to the middle of this diaphragm. That is the point of downward pressure that stimulates most of your breathing reflexes."

Another helpful description:

"Rather than think of the muscles working on the outside of your body, imagine two rods passing horizontally through your abdomen at the level of your pelvis, one from side to side, the other from the middle of the front to the back and where they cross each other, you apply downward pressure to support your sound."

These descriptions worked very well for me when that was the

advice I needed at that point, but they don't work so well if the student is not quite ready to respond to that particular piece of advice. As muscle release from Alexander Technique lessons penetrates deeper into the muscles, there is more response from such directions.

2. Visualisation: this is implied in most of the word descriptions and some students are better at it than others. The baritone who was also an artist had a remarkably strong ability to visualise muscle action. This ability is definitely enhanced by Alexander Technique lessons because the changes in muscle use are often achieved by visualising space or freedom in particular areas that are tense.
3. Drawings: my efforts at drawing the pharynx, tongue, jaw and teeth have improved considerably since I found myself in the situation of looking for more avenues of description of sound. I have even tried drawings of the inner muscles of the body as they relate to the various bones to give a student an idea of where to direct their thoughts.
4. Diagrams: some students are very vague about anatomy and I find that they function better if they see actual drawings of the area I am hoping that they will bring into their action. These are always ready for use pinned up on the wall of my studio. David Gormon's book "The Body Moveable" is perfect for this purpose.
5. Models: many Alexander teachers have scale models of the bones or complete skeletons to demonstrate a mechanical point about the movement of the body. When I am discussing a particular connection in the breathing action, I find that it is more accurate to direct the student's attention to a particular bone or joint and then direct or feel the muscle action starting in the ligaments.
6. Demonstration: this form of instruction is generally overused in singing lessons. It is useful for a beginner or a student who had very limited awareness of muscle use. But it is tiring on the teacher's voice and the student can always fall into the trap of imitating the teacher's vocal quality, rather than understanding exactly how he has achieved the tone. If the student has a strong ability to mimic, he falls more easily into this ultimately non-technical method of producing his voice. It is useful at times but should not be over-used.
7. Touch: this is a very powerful tool in the communication of new ideas. It can be used in several ways. The student can be asked to place his fingers against certain external muscles, for example the muscles just inside the front of the pelvis at the iliac crest.

The student can then feel if the muscles are responding or not. The teacher can also feel if the student is actually using these muscles, or if he just thinks he is. The student can also be asked to feel the teacher's muscles working in this way to get an idea of the muscle tone that can be achieved. This is useful because it is difficult to believe that unused muscles can actually become involved in energetic support. The success of this type of teaching depends on the personalities involved. Some students and teachers are more inhibited about such forms of instruction than others. If a student takes Alexander Technique lessons, he will become more familiar with learning new ideas through the sense of touch and will learn to direct new instructions in the muscle that can feel the teacher's or his own touch on the surface of his muscle layers.

It is not possible to overstate the increased powers of communication that the teacher can gain by training as an Alexander teacher. The training course initially increases one's own powers of direction all over the body and then one learns to communicate this through the hands by directing in one's own body and thinking directions in the student's body. It sounds simple in words but it takes three years to learn. There is no way that a singing teacher can learn to teach Alexander Technique without completing this demanding course. The results, however, are very satisfying. One's powers of observation are increased a hundredfold; one's understanding of body mechanics helps with the understanding of singing technique; one's ability to identify the muscles that are not working becomes a vital tool in one's own singing and in the students' singing; and, most important, one is given the power to actually change the posture for the better in those students that are being hindered by habitual postural imbalances.

However, not all teachers can afford the course, have the time, have the desire, are suitable candidates for, or are the right age group. Before I was able to successfully teach an Alexander Technique lesson, I worked in co-operation with several Alexander teachers, telling them what I was hoping a particular student might master in singing and describing some of his difficulties. Once the student got started on Alexander lessons, I would suggest to the student that he ask his teacher to teach him "whispered ah" or "monkey" because I felt that the student would benefit by learning how to incorporate this into his singing lessons so that ultimately he could learn what it feels like to

release tension in certain parts of his body while he was singing. I also taught the students while an Alexander teacher was present and their muscle use was observed when I asked the students to carry out a particular exercise. The Alexander teacher would then comment on unusual tension while the exercise was being sung, and then it would be repeated with the Alexander teacher placing her hands on an area of the body which would encourage the student to release while singing. Then the student would try to do this on his own trying to maintain the release in action. In this way the singing teacher and the Alexander teacher could deal with tension problems as they arise. It is quicker in the long run because the student is largely unaware of his tension habit and usually unable to cure it through will power. If there is limited time for this sort of co-operation, the mere fact that a teacher is willing to attend Alexander lessons can hardly fail to add to the quality of the teaching.

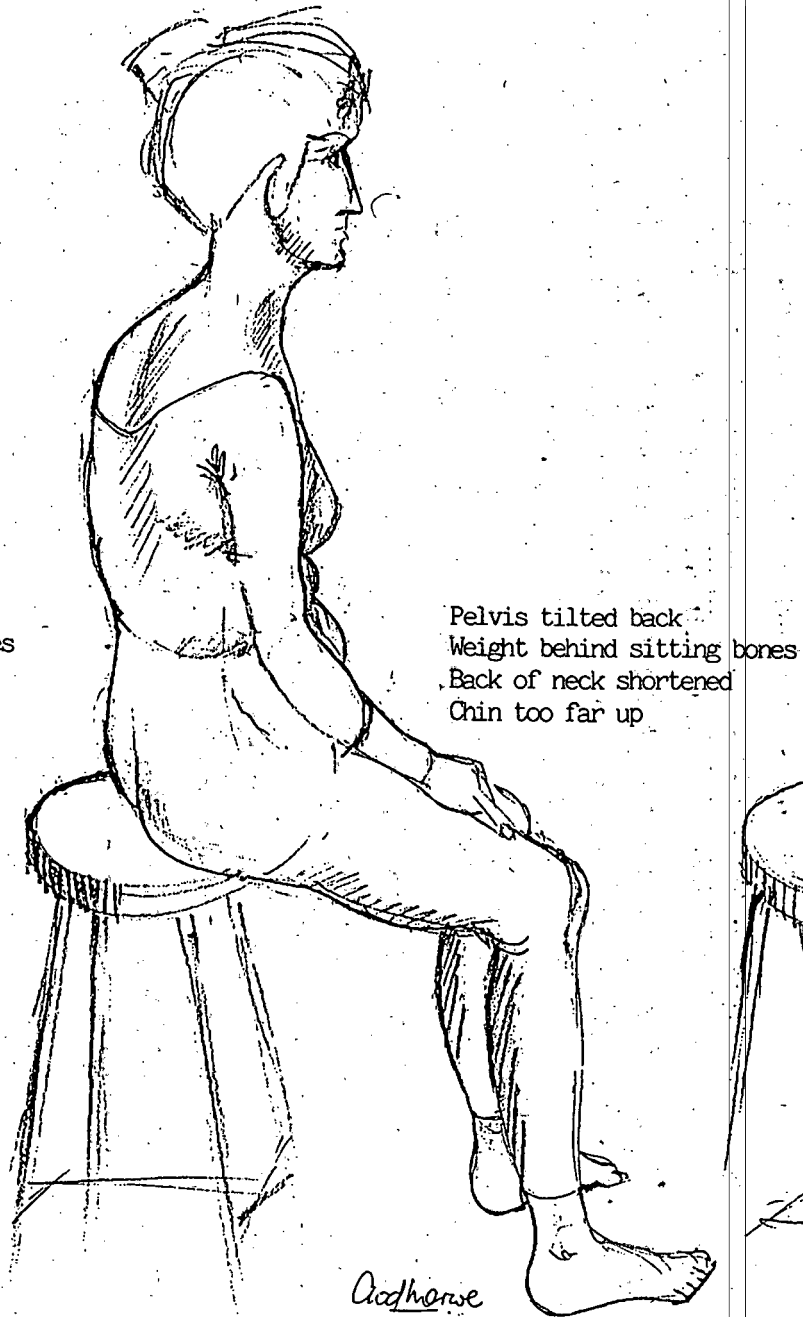
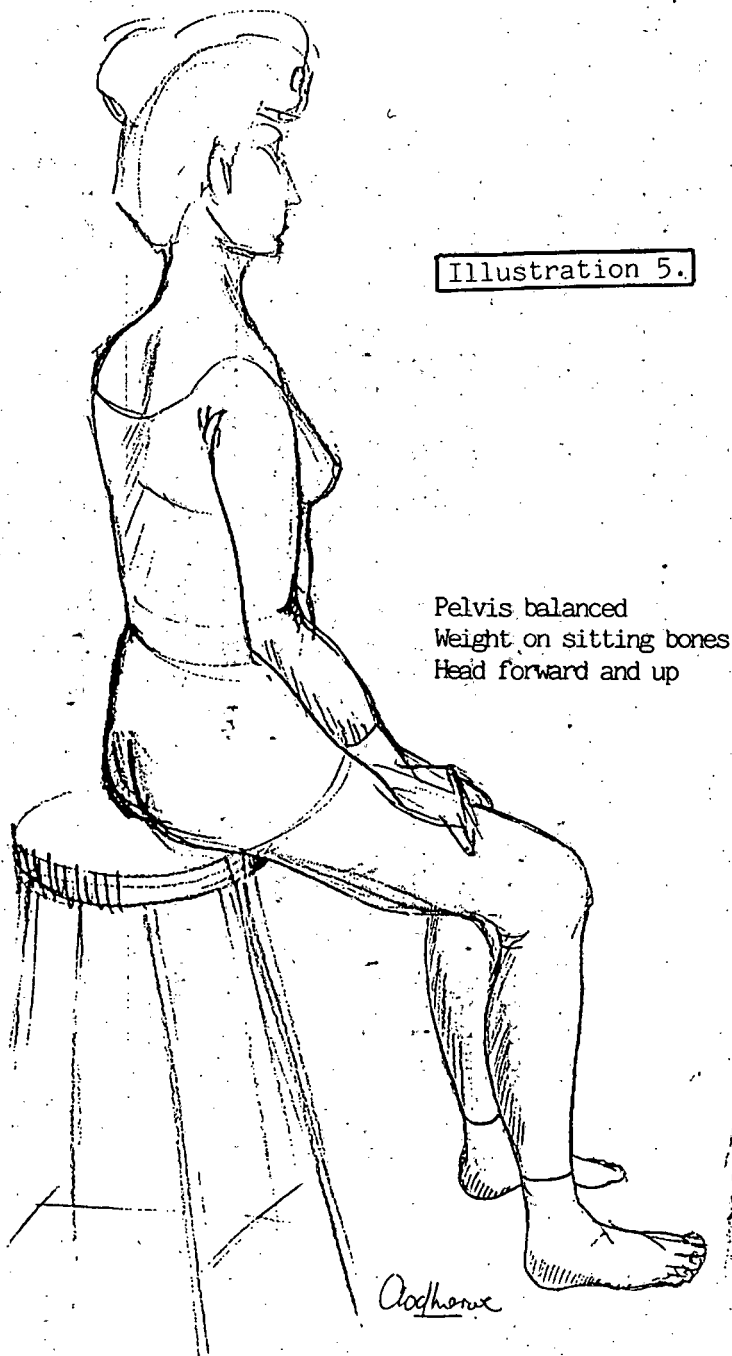
These then are the means whereby the teacher can help the student apply new ideas in breathing. Obviously they apply whether or not the student has taken Alexander Technique lessons.

Balanced stance

It is usual for an Alexander Technique lesson to start with learning releases while standing. The idea is for the student to find a distribution of his weight that allows him to make the most of his postural reflexes. I found a very clear description of the way in which this posture is maintained in Tidy's Massage and Remedial Exercises:

"Normally the body is kept in the correct posture by the beautifully balanced action of opposing muscle groups, and by efficient working of the nerves which control this type of muscular activity. Such activity is, in effect, an anti-gravity reaction. It is known as postural tone, and exists throughout the body. This form of work does not, however, produce fatigue in the same way as do voluntary contractions of the same muscles. If a man be asked to extend his spine, or even his knee, repeatedly, the muscles will soon tire; yet he can remain in a sitting or standing position for a very long time. Although the muscles are in a state of contraction, and although the impulses producing this condition are carried by the same nerves which initiate voluntary movement, the contraction is a static (isometric) one, and the stimuli reach the muscle fibres at a much slower rate - only about 8 or 9 per second, instead of the 50 or so per second

Illustration 5.



required to bring about a tetanic (isotonic) contraction. Moreover, each stimulus reaches only a small number of muscle-fibres, one set contracting, and then relaxing as another set contracts, so that no single fibre is in action for long at a time." ¹.

It is this postural tone that Alexander Technique helps to regain and the student learns a growing awareness of how to retain it even while singing; and certainly when preparing to sing. This means that the muscles begin their voluntary contractions for breathing from a balanced resting state rather than an already hard-working tense state. An example of this would be the student who tends to lean forward on the toes while singing, especially high notes. This leads to a tightening in the small of the back and, of course, makes the high notes much more difficult. Whereas, if he keeps his balance, the back can be brought into the support mechanism with no resistance from the series of muscles that were distorted to strain the body forward.

Sitting balance (See Illustration 5.)

The same principle can be applied to sitting. The Alexander student will learn very early on how to find his sitting bones and thereby stimulate all the reflexes that enable the torso to maintain an erect posture while sitting. These two lower points of the pelvis (ischial tuberosities) can support the trunk with the pelvis tilted in forward or backward positions and it is important that the student learns the middle position where he supports his torso without becoming tired.

Reflex-facilitated Breathing

It took me a long time to work out the value of naturally co-ordinated breathing as taught in Alexander lessons and its relevance for singers. Singers use different techniques and change their ideas about breathing throughout their lives. A thought process is enough to help one singer while another singer is helped by a "doing" action in the breathing. Everyone, including singers, operates a slightly different balance in normal everyday breathing. Yet the mechanism is constructed the same and one feels there must be an "ideal" system.

1. Tidy's Massage and Remedial Exercises, pp. 339 - 340.

The problem with research on breathing is that it invariably includes people with poor postural co-ordination. Thus the picture of natural breathing is distorted from the start. Any breathing technique evolving in such a situation would therefore include some element of compensation for interferences. The value of Alexander Technique when examining breathing technique is that it aims at reducing the interferences, rather than compensating for them.

Reflex-facilitated breathing, therefore, is allowing the breathing mechanism to operate without interference. Practically, that means with as little interference as possible. I learned this breathing in Alexander lessons, I experienced the guidance of my singing teacher towards this breathing, and gradually taught myself to sing with this natural breathing while practising. In time I learned to allow it into rehearsals and performances. Singers and non-singers alike interfere with their natural breathing and it is a most liberating experience to re-learn the natural flow of supported sound.

Lying on the table

The student follows the process described for lying on the table on page 39, releasing as much tension as possible. He then follows the process of the "whispered ah", described on page 41. A more detailed observation of what he is actually doing with his breathing now follows:

he lets all the air out of his lungs

he allows the breath to be drawn in by the lungs - it is a process of allowing the air pressure within the lungs to equal the air pressure outside

he counts numbers 1 ... whenever he runs out of air, not necessarily well enunciated

he allows air to fill his lungs after he has stopped counting by letting the ribs spring out sideways /

starts counting again.

N.B.

This process highlights the idiosyncrasies of the breathing mechanism. Some ribs do not spring out automatically, ESPECIALLY THE RIBS OF SINGERS, who have learned many complex ways of interfering with this spring. Some have flexibility in the epigastrium (stomach wall) and the upper chest area, so that their mechanism works on a vertical plane - their ribs move very little. Some

find it difficult to empty the lungs - this has to be achieved by letting the ribs fall towards the centre of the body NOT BY TIGHTENING THE EPIGASTRIUM OR ABDOMEN. This tightening can be observed easily by an onlooker, and not easily felt by the student, so it has to be pointed out the moment it occurs, otherwise he is usually unaware that it is time to stop for the next in flow of air.

The process can then be refined. The student can deliberately start counting when the ribs have sprung only half way to their full capacity, or when only quarter of the way. Then he can compare this with allowing the ribs to spring to nearly full capacity before starting to speak or sing. In this way he can decide how many numbers he can count according to the amount of air he has allowed to flow into his lungs. The sensation of speaking right to the last quantity of air WITHOUT TENSING is the one that allows the rib reflex to spring. Experiencing that last released "squeeze" on the air gives the singer

1. access to the reflex spring
2. several more seconds to add on to the length of his phrase
3. a sensation of the "core" of his sound
4. help with the UP direction of the body on expiration
5. extension of the full range of rib capacity
6. avoidance of the necessity for fixing the ribs at the most extended point because he learns to trust the extra reserve of the inner core
7. the tapering of the phrasing associated with the expiration of the last quantity of controlled air flow.

This is the process of becoming re-acquainted with the natural breathing capacity, obviously learnt much more successfully by demonstration rather than by reading. At no stage should the singer gasp for or drag in air - if he does this, he prevents the ribs from acting in a reflex-facilitated manner. It cannot be expected that a singer will never interfere with this reflex by forcing his ribs outwards, but it is useful for him to be able to distinguish between the two sensations. This is a practical experience of Tidy's description of postural tone (see page 134) - he is differentiating between a reflex-facilitated manner of allowing the ribs to operate and a voluntary manner of forcing the ribs to move in an outward direction. The most important aspect of this differentiation is the energy expended. Furthermore, the ribs become the phrasing controllers, which gives the singing that

essential warmth and sincerity associated with natural airflow.

Sitting (on a stool about 60 cm. high)

The added bonus to the reflex-facilitated rib action is that the muscles in the lower abdomen start to supply the energy in the vocal tone of their own accord. Releasing tension in the lower abdomen before making sound allows the natural connections of the flexor muscles running between the upper leg/front lower abdomen and the lower back ribs, vital to the coordination of support for the diaphragm and rib controlling action. Sitting on the stool makes the singer more aware of the actual movements in the muscles of the pelvic floor and he can learn to mentally direct the quality of this action. He can experience the same sensations sitting on the horse without leg tensions.

Standing

The whole system of reflex-facilitated breathing can be interfered with by tightening in the legs. Achieving success in lying and sitting positions encourages the singer to believe that tightness in the buttocks and legs is not necessary for making good sounds. The legs can be encouraged to stay free by testing whether or not the knees are braced - if the student stands with weight on one leg, the muscles of the thigh should not be hard and fixed, but respond loosely to rolling by the hands. The student can also stand on one leg and allow balancing and rebalancing to occur before placing the other foot on the floor - he should keep this balancing and rebalancing sensation in both legs while singing.

"Monkey"

The mechanical advantages of the "monkey" position can be put to good use once the Alexander student is advanced enough to sustain the "monkey" without undue strain. (Small children use this position automatically for bending and picking up objects, but in general adults have to re-learn the freedom in the joints designed for bending - ankles, knees and hips). "Monkey" enables the student to carry out an action with the extensor muscles of his body at their maximum length. To achieve this length he must release the whole extensor system from under the feet, behind the calf, through the thigh, behind the buttocks,

up the spine and into the base of the skull. In addition, he develops strength in the flexor system which balances the extensor system throughout the body. Reflex-facilitated action is stimulated by clear mental intention, which in turn allows muscles to lengthen, which in turn enables the muscle fibres to carry the intended action. By lengthening all the extensor muscles in the body the student is working from a position of maximum advantage which discourages him from shortening in his singing. Once he trusts this lengthening and it has become a part of his breathing mechanism, of course the "monkey" position has served its purpose.

Even if the singer develops ways of achieving the sounds he wants with specific deliberate actions within his breathing mechanism, it is important that he should retain his ability to operate reflex-facilitated breathing. If he does, then he can use this ability to measure how far from naturally co-ordinated breathing his technique is taking him. In practice this means that if an operatic role requires constant tension-producing breath control, or he is abnormally tired after singing the role, and he is losing his ability to operate reflex-facilitated breathing, then he has a tool for making a knowledgeable decision about the role. He can also use the reflex-facilitated breathing to release whatever tension is being retained in his muscles after a strenuous rehearsal or performance. He can use the reflex-facilitated breathing while learning the role in order to save himself from building unnecessary tension habits into his performance of the role. It is, however, my own experience that the performances I have given in which I have used reflex-facilitated breathing to my maximum ability are the ones which have been most enjoyable for both the audience and myself.

The Reality of Tension

I return, however, to the point made by Leigh Howard on page 6 - "awareness of physical tension as a fact..." In reality one has to live with tension as a singer and one is also faced as a singing teacher with students at very different stages in relation to the ideal of reflex-facilitated breathing,

some of them moving further and further away from it. Each student has a different combination of difficulties:

- a) learned habits of "breathing technique" - rigid abdomen, fixed ribs, pushing diaphragm, tight gluteal muscles, tight thighs, stiff knees and feet. These can take years to eliminate.
- b) minimal breathing flexibility that requires conscious development.
- c) Imbalanced activity in the breathing mechanism that eventually relies on the total support from one muscle group while cancelling out the activities of another muscle group.
- d) loss of belief in the breathing system that leads to a "shut down" in the whole system.
- e) good natural breathing balance that needs to be increased for extension of range.

Whatever category a singer fits into, his responsibility is to use his breathing mechanism as flexibly as he can at every stage, if he wants to retain his vocal quality throughout his career. Over-tense muscles become exhausted over the years of undue wear and tear and it is a sad event for the singer's main skill and means of self-expression to become prematurely exhausted. Alexander Technique assists the singer in finding the balance between effort and ease and redressing it when necessary.

From the teacher's point of view, it can be a long, painstaking path from the over-tense breathing mechanism to the flexible command of natural air flow; but, for the long term health of the student's voice, it is necessary to keep the student's direction aimed towards the natural breath support. This is as true for professional students as it is for those who take singing lessons purely as a therapy.

Once the breath support attains an easy flow, the finer details of vowel formation, mouth position, tongue agility, jaw release, facial tension and "placing" of resonance become much more responsive to true mental direction. The increased powers of mental direction gained in Alexander Technique lessons are invaluable

when dealing with these factors.

It must be recognised that a skill learned with ingrained tension habits will be dominated by those habits until such time as the Alexander re-education is strong enough and clear enough to compete with the ingrained response to the stimulus of wanting to execute the skill in an "end-gaining" manner. To reach this stage, it is necessary for the singer to have a sufficient numbers of lessons to apply the principle of inhibition and thereby allow the skill to "happen". There is no standard "course" of lessons because this stage is reached by different people at different speeds. Descriptions and theoretical principles are useful, but do not take the place of the direct experience gained with the assistance of an Alexander Technique teacher. Once the process of applying improved use becomes an integral part of the singer's awareness, he has acquired a fundamental skill vital to his development as a performing artist.

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